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ABSTRACT

These task analyses are designed to be used in combination with the "Trade and Industrial Education Service Area Resource" in order to implement competency-based education in the commercial photography program in Virginia. The task analysis document contains the task inventory, suggested task sequence lists, and content outlines for the courses in commercial photography. Section 1 of this publication contains a validated task inventory for commercial photography. For each task, applicable information pertaining to performance and enabling objectives, criterion-referenced measures, and suggested instructional activities and aids is provided. Section 2 provides descriptions of the secondary program and courses for commercial photography. Included with each course description is a task sequence list, which provides a suggested order of the task inventory for actual instruction, and course content outlines. The instructional topics within the outlines have been cross-referenced with the corresponding task/competency codes from the task inventory in Section 1. Throughout the guide, resources are suggested. The appendixes provide 26 pages of resource lists, including references to books, photographic series, periodicals, professional associations, audiovisual materials, and supplies and equipment. Also appended is a photograph critique checklist. (KC)

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ED301652

Commercial Photography:

Task Analyses

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Commonwealth of Virginia
Department of Education
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Richmond, Virginia 23216

1985

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Review Draft

COMPETENCY-BASED
CBE
EDUCATION

GUIDE APPLICATION

This task analyses guide is based on the following Dictionary of Occupational Titles (DOT) job titles contained in the occupational domain of commercial photography:

Dot Job Title	DOT Code
Photographer Helper	976.667-010
Photographer, Still	143.062-030
Photojournalist	143.062-034
Photofinishing Laboratory Worker	976.687-018
Photograph Finisher	976.487-010

Therefore the guide is useful in developing and selecting instructional materials and in implementing competency-based education for the following program and courses:

Program	Courses
COMMERCIAL PHOTOGRAPHY OCCUPATIONS (CIP Code 48.0204)	COMMERCIAL PHOTOGRAPHY I (Va. #8607) COMMERCIAL PHOTOGRAPHY II (Va. #8608)

Additional information concerning the application and use of this guide in program planning and developing may be obtained from the following office:

Trade and Industrial Education Service
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Task Analyses

For

Commercial Photography

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1985

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FOREWORD

In the next decade, businesses and industries in Virginia will require large numbers of skilled workers. Therefore, vocational education at the secondary and postsecondary levels will have the responsibility of preparing individuals for a variety of occupations.

Competency-based education (CBE) provides the preparation students need for entry into the Virginia work force. The CBE practice of recording competencies developed by students helps them to make a smooth transition between secondary and postsecondary programs when both levels of education are required for career training. In addition, CBE is effective in retraining workers who have been displaced because of changing technology.

This resource will assist teachers and administrators in developing instructional materials that meet the needs of students and industry and comply with the Virginia CBE standards for vocational and adult education.

S. John Davis
Superintendent of Public Instruction

Melvin H. Garner
Administrative Director
Vocational and Adult Education

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This task analyses guide for competency-based education in Commercial Photography is the result of a coordinated effort on the part of the project participants.

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CONTENTS

Page

INTRODUCTION 1

SECTION 1. TASK INVENTORY

Introduction 3
Task Inventory for Commercial Photography 7
Duty Areas:
  Selecting and Assembling Equipment and Supplies 9
  Operating and Maintaining 35mm Single Lens Reflex Camera and Accessories 29
  Planning and Setting Up Simple Subjects 49
  Determining Exposure and Operating Meters 67
  Using Camera Controls and Accessories for Creative Effect 103
  Operating and Maintaining View Camera 115
  Processing and Finishing Films and Prints 127
  Documenting People and Events 177
  Photographing Architectural Subjects and Landscapes 187
  Photographing for Creative Effect and Self-Expression . . . 195
  Using Studio Lighting 207
  Photographing Subjects for Commercial Purposes 225
  Using Special Materials and Techniques 233
  Making Photographic Copies 239
  Developing Critical Skills 247
  Marketing, Publishing, and Exhibiting Work 263

Section 2. PROGRAMS AND COURSES

Introduction 289
Secondary Programs and Courses 291
Commercial Photography I (8607):
  Description and Sequence 293
  Outline and Code 297
Commercial Photography II (8608):
  Description and Sequence 301
  Outline and Code 305

APPENDICES

Appendix A: Information and Resources
  Books 311
  Book Collections, Photographic Series, and Major Photographic Publishers 319
  Other Resource Materials 322
  Periodicals 323
Appendix B: Professional Associations 325
Appendix C: Audiovisual Materials 327
Appendix D: List of Equipment and Supplies 333
Appendix E: Checklists 339

INTRODUCTION

This task analyses guide is designed to be used in combination with the Trade and Industrial Education Service Area Resource in order to implement competency-based education (CBE) in the courses Commercial Photography I and II. The service area resource contains information that pertains to all programs within the Trade and Industrial Education service area; the sections of that publication are titled Occupational Information, Student Organization (VICA), Classroom Management Systems, and Recording Systems. This task analyses guide contains the task inventory, suggested task sequence list, and content outline for the specific courses in Commercial Photography Occupations. Detailed instructions for combined use of these two publications are contained within the service area resource.

Using the Task Analyses

Section 1 of the task analyses guide contains a validated task inventory for Commercial Photography. For each task, applicable information pertaining to performance and enabling objectives, criterion-referenced measures, and suggested instructional activities and aids is provided. In this section, tasks are arranged by worker duty areas only, and no attempt has been made to sequence tasks in instructional order.

Section 2 provides a description of the Trade and Industrial Education program which incorporates Commercial Photography I and II. This is followed by a description of each course, a task sequence list which provides a suggested order of the task inventory for actual course instruction, and a course content outline. The instructional topics within the course content outline have been cross-referenced with corresponding task/competency codes from the task inventory in Section 1.

It is suggested that the Section 2 task sequence list and course content outline be reviewed initially so that any desired changes in sequencing of instruction can be made. Once the sequencing is confirmed, instructional planning and implementation may proceed through referral to the Section 1 task/competency sheet noted beside each instructional topic within the outline.

SECTION 1.

TASK INVENTORY

One of the major characteristics of competency-based education (CBE) is that the course content is based upon actual jobs or tasks performed by the worker. In Virginia, the Department of Education has established standards for competency-based education. According to these standards, competencies must be role-relevant and based upon appropriate research. This standard states:

> Role-relevant competencies are identified and stated.
>
> The competencies, with standards, will be identified through V-TECS, IDECC, and other appropriate research. Advisory committees should be used to review competencies and standards. Competencies in the affective domain will be included. Role-relevant competencies for occupational preparation programs are those that specifically relate to the occupation for which the student is being prepared, as well as to the personal needs of the student. Role-relevant competencies are related also to orientation, exploration, and/or industrial arts experiences which have been identified for students.

Therefore, role-relevant jobs or tasks, called competencies in CBE, must be identified and validated before instructional materials are developed and subsequent instruction can take place. The task list contained in this task analyses guide is based on the following:

1. Job titles and descriptions found in the Occupational Outlook Handbook and the Dictionary of Occupational Titles.
2. Input from trade and industrial education supervisors, teachers, and curriculum specialists.
3. Input from local craft advisory committee members.

The information collected and reviewed from these sources was used to compile a task inventory.

The next major step involved in the development of the task inventory was validation of the listed tasks. The task inventory section contains minimum job-entry tasks/competencies. Validation is essential if the information collected is to be useful in operating CBE courses and programs. The validation process involved the following:

1. Review by writing team members to determine completeness of the inventory.
2. Review and validation by local craft advisory committee to ensure the role-relevance and completeness of the inventory.
3. Final review and editing by writing team members, project directors, and state staff.

This process was used to determine if the identified tasks were performed by workers currently employed and if the task was critical for entry-level performance. The process also was used to determine the time required to complete the specified task.

The task list included in this task analyses guide was based on current available resources and was validated by teachers, advisory committee members, and incumbent workers in trade and industrial occupations. It is essential that all instruction be based on the validated task inventory included in this guide.

The task inventory sheets are arranged by duty area for Commercial Photography Occupations. Information contained on each two-page form is as follows:

1. The task/competency for a given duty area which is performed by incumbent workers.
2. Program and course application information.
3. Selected performance and enabling objectives for instructional materials development.

4. Criterion-referenced measures used to determine successful attainment of task/competency by the student.

5. Selected learning activities and steps required for teaching the minimum task/competency.

6. Equipment, tools, and materials/supplies required to provide necessary instruction.

7. Selected references and audiovisual materials helpful in teaching the task/competency.

TASK INVENTORY
FOR

COMMERCIAL PHOTOGRAPHY OCCUPATIONS

(48.0204)

DUTY AREAS

1. Selecting and Assembling Equipment and Supplies
2. Operating and Maintaining 35mm Single Lens Reflex Camera and Accessories
3. Planning and Setting Up Simple Subjects
4. Determining Exposure and Operating Meters
5. Using Camera Controls and Accessories for Creative Effect
6. Operating and Maintaining View Camera
7. Processing and Finishing Film and Prints
8. Documenting People and Events
9. Photographing Architectural Subjects and Landscapes
10. Photographing for Creative Effect and Self-Expression
11. Using Studio Lighting
12. Photographing Subjects for Commercial Purposes
13. Using Special Materials and Techniques
14. Making Photographic Copies
15. Developing Critical Skills
16. Marketing, Publishing, and Exhibiting Work

DUTY AREA

1. SELECTING AND ASSEMBLING EQUIPMENT AND SUPPLIES

TASKS/COMPETENCIES

1.1 Select film

1.2 Select photographic papers

1.3 Identify characteristics of various types of cameras

1.4 Identify characteristics of various types of photographic filters

1.5 Identify characteristics of various types of meters

1.6 Identify characteristics of various types of lenses

1.7 Identify characteristics of basic accessories

1.8 Identify characteristics of studio equipment

1.9 Identify characteristics of darkroom and finishing lab equipment

DUTY AREA

1. SELECTING AND ASSEMBLING EQUIPMENT AND SUPPLIES

TASK / COMPETENCY

1.1 Select film

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

1.1

PERFORMANCE OBJECTIVE

P1.1 Given a selection of black and white and color films and a list of six lighting conditions, select the appropriate film for each situation and identify distinguishing characteristics of each film. Ninety percent of answers must be correct as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E1.1.1 Define these common film terms: emulsion, silver halides (crystals), base, anti-halidation backing, grain, speed (light sensitivity), ASA, color sensitivity, latitude, characteristic curve, contrast, resolving power, acutance, bulk-loaded film, film size, panchromatic, and orthochromatic.

E1.1.2 Label and explain the function of the layers in black and white and color films.

E1.1.3 Interpret film manufacturer's specifications to determine film type, film acutance, and use.

E1.1.4 State differences between black and white and color films.

E1.1.5 Identify advantages and disadvantages, relative to speed, grain, and image quality, of the most common black and white and color films in various lighting situations.

CRITERION-REFERENCED MEASURE

C1.1 Select the appropriate black and white and color films for each of six lighting situations and identify distinguishing characteristics of each film. Ninety percent of answers must be correct as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Distribute and discuss vocabulary sheets on common film terms (E1.1.1).
2. Assign reading in text on film (E1.1.1-E1.1.5).
3. Discuss, using a poster and handouts, the function of each layer of black and white and color films (E1.1.2).
4. Collect, display, and discuss examples of film, film packages, and manufacturer's specifications (E1.1.3).
5. Have students practice reading and interpreting film specifications (E1.1.3).
6. Have students list differences between black and white and color films (E1.1.4).

SELECTED TOOLS AND MATERIALS

Black and white films
(ASA 32, 125, and 400)
Kodak Technical Pan film
Kodak High Speed Infrared film
Kodalith film
Other black and white films
Bulk-loaded film samples
Color negative and transparency (reversal or slide) films
Sample black and white and color photographs to illustrate results of using different films
Sample black and white and color slides and negatives to show different characteristics of each type of film
Teacher-prepared poster/handouts illustrating and identifying function of each layer of film

SELECTED AUDIOVISUAL MATERIALS

Filmstrip: Developing Black and White Roll Film. Instructional Media Associates, Inc.
Sound/Slides: Film: How It Works (#648). The Center for Humanities, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 3. Joel A. Benedict.
Photography, 2nd ed., Chapters 4 and 13. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 4 and 13. Charles Swedlund.

Application

DUTY AREA

1. SELECTING AND ASSEMBLING EQUIPMENT AND SUPPLIES

TASK/COMPETENCY

1.2 Select photographic papers

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

1.2

PERFORMANCE OBJECTIVE

P1.2 Given a selection of black and white and color photographic papers and a group of 12 prints, select the appropriate paper to reproduce each of 10 of the prints and identify distinguishing characteristics of each paper. Ninety percent of the answers must be correct as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E1.2.1 Define these common paper terms: paper emulsion speed, paper color sensitivity, paper size, paper grade (contrast), image tone (warm/cold blacks), base tint (color of highlights), paper texture, fiber-based paper, resin-coated paper, variable contrast paper, variable contrast printing filters, paper weight (double--DW, single--SW, medium--MW), paper exposure latitude, positive image, contact print, enlargement, Cibachrome, and Ektacolor paper.

E1.2.2 List and explain the function of each grade of black and white graded photographic paper and each variable contrast printing filter.

E1.2.3 Interpret manufacturer's coded paper specifications.

E1.2.4 State differences between black and white and color papers.

CRITERION-REFERENCED MEASURE

C1.2 Select the appropriate photographic paper to reproduce each of 10 prints and identify distinguishing characteristics of each paper. Ninety percent of all answers must be correct as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Discuss with students key terms and concepts related to photographic papers (E1.2.1).
2. Assign reading in text on photographic papers (E1.2.1-E1.2.4).
3. Display and discuss types of black and white photographic papers; have students identify distinguishing characteristics (E1.2.1-E1.2.4).
4. Collect, display, and discuss examples of paper packages and manufacturer's specifications (E1.2.3).
5. Have students practice reading and interpreting paper specifications (E1.2.3).
6. Have students list differences between black and white and color papers (E1.2.4).

SELECTED TOOLS AND MATERIALS

Graded contrast paper, grades 1-6 (fiber-based and resin-coated in various sizes, finishes, weights, and tones)
Variable contrast paper (fiber-based and resin-coated in various sizes, finishes, and tones)
Variable contrast filters
Examples of black and white and color prints
Color paper packages (Cibachrome and Ektacolor)

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Contact Sheet. Instructional Media Associates, Inc.
AV Program: Enlarging. Instructional Media Associates, Inc.
AV Program: Darkroom Tools and Techniques. Instructional Media Associates, Inc.
Sound/Slide: How to Print and Enlarge. The Center for Humanities, Inc.
Filmstrip/Cassette: Printing Black and White. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 3. Joel A. Benedict.
Photography, 2nd ed., Chapter 7. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 7. Charles Swedlund.

Application

DUTY AREA

1. SELECTING AND ASSEMBLING EQUIPMENT AND SUPPLIES

TASK/COMPETENCY

1.3 Identify characteristics of various types of cameras

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

1.3

PERFORMANCE OBJECTIVE

P1.3 Given pictures or samples of the four major types of cameras, identify the major parts of each camera and explain the functions of the viewing, focusing, shutter, aperture, film transport and other systems. Eighty percent of answers must be correct as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E1.3.1 Identify the major parts and functions of the rangefinder, single lens reflex (SLR), twin lens reflex (TLR), and view cameras, including the following: viewing system, film transport, body, diaphram/aperture, shutter, lens, focusing system, and shutter release.

E1.3.2 Explain the advantages and disadvantages of each of the four major types of cameras, including the following: size and weight, convenience of film, negative size, lens interchangability, noisiness, viewing, focusing, continuity, transport, and expense.

E1.3.3 Identify film size for each major camera type.

CRITERION-REFERENCED MEASURE

C1.3 Identify the major parts of each of the four major types of cameras and explain the functions of the viewing, focusing, shutter, aperture, film transport, and other systems. Eighty percent of answers must be correct as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Distribute and discuss vocabulary sheets on basic camera terms (E1.3.1).
2. Assign reading in text on types of cameras (E1.3.1-E1.3.3).
3. Display and discuss the four major types of cameras; have students identify distinguishing characteristics of each (E1.3.3).
4. Demonstrate major systems of each camera and describe function of each (E1.3.1-E1.3.3).
5. Have students compare the advantages and disadvantages of the four major types of cameras (E1.3.3).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with lens
35mm rangefinder camera with lens
120mm single lens reflex camera with lens
120mm twin lens reflex camera with lens
4"x5" view camera with lens, tripod, cable release, focusing cloth, and film holder
Black and white film (35mm, 120mm, and 4"x5" sheet)
Teacher-prepared illustration of the four major types of cameras

SELECTED AUDIOVISUAL MATERIALS

AV Program:	The Camera. Instructional Media Associates, Inc.
AV Program:	Camera Systems. Instructional Media Associates, Inc.
Filmstrip/Cassette:	Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 3. Joel A. Benedict.
Photography, 2nd ed., Chapter 2. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 2. Charles Swedlund.

DUTY AREA

1. SELECTING AND ASSEMBLING EQUIPMENT AND SUPPLIES

TASK/COMPETENCY

1.4 Identify characteristics of various types of photographic filters

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

1.4

PERFORMANCE OBJECTIVE

P1.4 Given a selection of black and white and color filters and a selection of slides and prints, identify the filter used for the lighting situation in each print or slide. Label each piece according to contrast, tone, color balance, and other characteristics determined by instructor. Ninety percent of identifications and labels must be correct as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E1.4.1 Define common filter terms, including the following: contrast, tone, filter factor, color balance, color correction filter, wave length, ultraviolet (UV), polarizer, neutral density filter, and reflected light.

E1.4.2 Identify and explain the function of selected black and white and color filters.

E1.4.3 Interpret manufacturer's coded filter specifications.

CRITERION-REFERENCED MEASURE

C1.4 Identify the lighting situation and the black and white or color filter used to produce each print or slide within a selected group. Each piece must be labeled according to contrast, tone, color balance, and other characteristics determined by the instructor. Ninety percent of identifications and labels must be correct as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Distribute and discuss vocabulary sheets on basic black and white and color photographic filter terms (E1.4.1).
2. Assign reading in text on types of filters (E1.4.1-E1.4.3).
3. Display and discuss various types of black and white and color filters; have students identify distinguishing characteristics (E1.4.1-E1.4.3).
4. Collect, display, and discuss prints that illustrate the effect of each filter (E1.4.2).
5. Have students practice reading and interpreting manufacturer's coded filter specifications (E1.4.3).

SELECTED TOOLS AND MATERIALS

Black and white and color photographic filters (See Appendix D, #5)
Examples of prints and transparencies taken with different filters
Teacher-prepared chart on filter data

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Camera. Instructional Media Associates, Inc.
AV Program: Camera Systems. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 23 and 37. Joel A. Benedict.
Photography, 2nd ed., Chapters 4 and 13. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 4 and 13. Charles Swedlund.

Application

DUTY AREA

1. SELECTING AND ASSEMBLING EQUIPMENT AND SUPPLIES

TASK/COMPETENCY

1.5 Identify characteristics of various types of meters

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

1.5

PERFORMANCE OBJECTIVE

P1.5 Given pictures or samples of three types of reflected-light meters (spot, camera, hand-held) and one type of incident-light meter (hand-held), identify the major parts and explain their functions, including the following: reflected-light sensitive cell, incident-light diffuser, ASA dial, shutter speed/aperture ring, area of coverage, gauge, light scale, and other characteristics determined by the instructor. Give a specific situation in which each meter might be used. Ninety percent of all answers must be correct as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E1.5.1 Define common meter terms, including the following: reflected light, incident light, incident-light diffuser, exposure, f-stop/aperture, shutter speed, ASA setting, middle gray, luminance, highlights, shadows, tones, texture, spot meter, built-in-meter, hand-held meter, overexpose, underexpose, reciprocity, and bracketing.

E1.5.2 Identify and explain the function of designated meters.

E1.5.3 Interpret manufacturer's instruction manuals.

E1.5.4 Explain the advantages and disadvantages of each of the four basic types of meters listed, including the following: size, weight, area of coverage, convenience, and adaptability to certain situations.

CRITERION-REFERENCED MEASURE

C1.5 Identify the parts and explain the functions of three types of reflected-light meters and one type of incident-light meter, including the following: reflected-light sensitive cell, incident-light diffuser, ASA dial, shutter speed/aperture ring, area of coverage, gauge, light scale, and other characteristics determined by the instructor. Give a specific situation in which each meter might be used. Ninety percent of answers must be correct as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Distribute and discuss a vocabulary list of meter terms (E1.5.1).
2. Assign reading in text on light meters and their use (E1.5.1-E1.5.4).
3. Display and discuss various types of meters; have students identify distinguishing characteristics of each type (E1.5.1-E1.5.4).
4. Have students practice using different meters (E1.5.2).
5. Have students read and discuss manufacturer's instruction manuals (E1.5.3).

SELECTED TOOLS AND MATERIALS

Camera with built-in reflected-light meter
Hand-held reflected-light meter
Spot meter (reflected-light meter)
Hand-held incident-light meter
Standard 18% neutral gray card
Teacher-prepared chart on types of meters

SELECTED AUDIOVISUAL MATERIALS

Filmstrip/Cassette: Exposure. Greystone Films, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 29. Joel A. Benedict.
Photography, 2nd ed., Chapter 5. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 5. Charles Swedlund.

DUTY AREA

1. SELECTING AND ASSEMBLING EQUIPMENT AND SUPPLIES

TASK/COMPETENCY

1.6 Identify characteristics of various types of lenses

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

1.6

PERFORMANCE OBJECTIVE

P1.6 Given a selection of various lenses and a selection of prints, identify the lens used for each and the composition that resulted. Label each print according to focal length, depth of field, perspective, and other characteristics determined by the instructor. Ninety percent of answers must be correct as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E1.6.1 Define common lens terms, including the following: focal length, depth of field, perspective, normal lens, short lens, long lens, circles of confusion, aperture, diaphragm, shutter, point of convergence, convex, concave, refraction, interchangeable, vignette, wide-angle, telephoto, distortion, fisheye, zoom, macro, hyperfocal distance, infinity, zone focus, aberrations, stopping-down, opening-up, lens shade, lens coating, lens tissue, lens cleaner, and lens mount.

E1.6.2 Identify and explain the functions of selected lenses.

E1.6.3 Explain the advantages and disadvantages of each of the lenses listed under Selected Tools and Materials, including weight, size, convenience, depth of field, and perspective.

E1.6.4 Interpret manufacturer's instruction manuals.

CRITERION-REFERENCED MEASURE

C1.6 Identify the lens used to produce each print within a selected group and describe the resulting composition. Each print must be labeled according to focal length, depth of field, perspective, and other characteristics determined by the instructor. Ninety percent of answers must be correct as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Distribute and discuss a vocabulary list of lens terms (E1.6.1).
2. Assign reading in text on lenses (E1.6.1-E1.6.4).
3. Display and discuss various types of lenses; have students identify distinguishing characteristics of each type (E1.6.1-E1.6.4).
4. Have students practice attaching and detaching lens from camera body (E1.6.2).
5. Have students read manufacturer's instruction manual and interpret lens markings (E1.6.4).
6. Collect, display, and discuss prints illustrating effects of different lenses (E1.6.2, E1.6.3).

SELECTED TOOLS AND MATERIALS

Camera body
Telephoto lens
Wide angle lens
Zoom lens
Fisheye lens
Normal lens
Macro lens
Examples of prints taken with different lenses
Teacher-prepared chart on types of lenses

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Camera. Instructional Media Associates, Inc.
AV Program: Camera Systems. Instructional Media Associates, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapter 3. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 3. Charles Swedlund.

Application

DUTY AREA

1. SELECTING AND ASSEMBLING EQUIPMENT AND SUPPLIES

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

1.7 Identify characteristics of basic accessories

COURSE

Commercial Photography I (8607)

1.7

PERFORMANCE OBJECTIVE

P1.7 Given a selection of basic camera accessories and a camera, identify the assessories and define their functions. Ninety percent of answers must be correct as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E1.7.1 Identify and define common accessories, including the following: cable release, tripod, camera bag, lenses, filters, lens tissue, lens cleaner, lens brush, changing bag, flash and bracket, and hotshoe.

E1.7.2 List major advantages and uses of designated camera accessories.

E1.7.3 Interpret manufacturer's instruction manuals on accessories.

CRITERION-REFERENCED MEASURE

C1.7 Identify a selection of basic camera accessories and define their functions. Ninety percent of answers must be correct as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Distribute and discuss a vocabulary list of basic camera accessories (E1.7.1).
2. Assign reading in text on accessories (E1.7.1-E1.7.3).
3. Display, discuss, and demonstrate use of various basic camera accessories (E1.7.1-E1.7.3).
4. Have students interpret manufacturer's specifications for accessories (E1.7.3).

SELECTED TOOLS AND MATERIALS

Filters
Camera bag
Tripod
Lenses
Cable release
Lens tissue
Lens cleaner
Lens brush
Changing bag
Flash and bracket
Hotshoe
Teacher-prepared charts/illustrations on camera accessories

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Camera. Instructional Media Associates, Inc.
AV Program: Camera Systems. Instructional Media Associates, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapter 2. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 2. Charles Swedlund.

Application

DUTY AREA

1. SELECTING AND ASSEMBLING EQUIPMENT AND SUPPLIES

TASK/COMPETENCY

1.8 Identify characteristics of studio equipment

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

1.8

PERFORMANCE OBJECTIVE

P1.8 Given a selection of basic studio equipment, identify and define the function of each. Eighty percent of answers must be correct as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E1.8.1 Identify a selection of common studio equipment, including the following: seamless background paper, light stands, photofloods and reflectors, studio flash units (strobes), umbrellas, boom, diffusers, barndoors, scrims, snoots, studio tripod, dolly, DC and AC cords, cables, hand-held meter, standard 18 % neutral gray card, spots, broads, sets, and props.

E1.8.2 Explain the function and uses of designated studio equipment, lights, and accessories.

CRITERION-REFERENCED MEASURE

C1.8 Identify and define the function of each item in a selection of studio equipment. Eighty percent of answers must be correct as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Distribute and discuss a vocabulary list of photographic studio terminology (E1.8.1).
2. Display examples or illustrations of selected studio equipment; have students identify each piece (E1.8.1, E1.8.2).
3. Assign reading in text on studio equipment (E1.8.1, E1.8.2).
4. Have students practice using studio equipment (E1.8.1, E1.8.2).

SELECTED TOOLS AND MATERIALS

Seamless background
Light stands
Photofloods and reflectors
Strobe units
Umbrellas
Booms
Diffusers
Barndoors
Scrims
Snoots
Studio tripod

Dolly
DC and AC cords
PC extension cords and cables
Hand-held meter
Standard 18% neutral gray card
Spots
Broads
Sets and props
Teacher-prepared illustrations of various studio equipment (See Appendix D, #6)

SELECTED AUDIOVISUAL MATERIALS

Filmstrip:	Lighting. Instructional Media Associates, Inc.
Slide/Tape:	Shedding Light on Light. Media Loft, Inc.
Slide/Tape:	Thinking Photographically. Media Loft, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 38. Joel A. Benedict.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 9. Charles Swedlund.

Application

DUTY AREA

1. SELECTING AND ASSEMBLING EQUIPMENT AND SUPPLIES

TASK/COMPETENCY

1.9 Identify characteristics of darkroom and finishing lab equipment

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

1.9

PERFORMANCE OBJECTIVE

P1.9 Given a working darkroom and finishing lab, identify selected equipment and tools used in the facility and define the function of each. Ninety percent of answers must be correct as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E1.9.1 Identify common darkroom and finishing lab equipment, including the following: darkroom sinks (print, wash, etc.), temperature control unit, chemical mixing and storage tanks and bottles, graduates, funnels, thermometers, film processing tanks, timers, film reels and hangers, film drying cabinet, enlargers and lenses, easels, print processing trays, contact printer, contact printing frame, paper safe, grain focuser, safelights, red filters, variable contrast filters, negative carriers, tongs, stirrers, rubber gloves and goggles, dodging and burning tools, paper cutter, changing bag, film loading booth, squeegees, film clips, drying rack, print dryer, dry mount press, tacking iron, straight edge, mat cutter, retouching dyes, color printing filters, film drum, paper drum, film washer, film cassette, cassette opener, temperature holding trays, silkscreen and accessories, and negafiles or glassine envelopes.

E1.9.2 Identify and follow photo lab safety precautions.

CRITERION-REFERENCED MEASURE

C1.9 Identify and define the function of selected darkroom and finishing lab equipment and tools. Ninety percent of answers must be correct as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Distribute and discuss a vocabulary list of darkroom and finishing lab terminology (E1.9.1).
2. Have students identify the function and demonstrate the use of tapes and equipment in a working photo lab (E1.9.1, E1.9.2).
3. Assign reading in text on photo lab equipment (E1.9.1, E1.9.2).
4. Have students list, explain, and demonstrate photo lab safety rules; give students a written and practical exam on safety rules and procedures (E1.9.2).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See E1.9.1 or Appendix D, #11-13)

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Darkroom Tools and Techniques. Instructional Media Associates, Inc.
Filmstrip/Cassette:	Developing Black and White Films. Greystone Films, Inc.
Filmstrip/Cassette:	Developing Black and White Roll Film. Instructional Media Associates, Inc.
Sound/Slide:	Effective Darkroom Technique (#636). The Center for Humanities, Inc.
Filmstrip/Cassette:	Printing Black and White. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 7-12. Joel A. Benedict.
Photography, 2nd ed., Chapters 6-8. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 6-8. Charles Swedlund.

DUTY AREA

2. OPERATING AND MAINTAINING 35MM SINGLE LENS REFLEX CAMERA AND ACCESSORIES

TASKS/COMPETENCIES

2.1 Load and unload a 35mm single lens reflex camera

2.2 Set ASA

2.3 Load and unload a 35mm film cassette

2.4 Turn on and read in-camera meter

2.5 Set shutter speed and adjust aperture

2.6 Set aperture and adjust shutter speed

2.7 Frame, focus, and shoot picture

2.8 Rewind film

2.9 Maintain 35mm single lens reflex camera

Application

DUTY AREA

2. OPERATING AND MAINTAINING 35MM SINGLE LENS REFLEX CAMERA AND ACCESSORIES

TASK/COMPETENCY

2.1 Load and unload a 35mm single lens reflex camera

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

2.1

PERFORMANCE OBJECTIVE

P2.1 Given a 35mm single lens reflex camera and roll of 35mm film, load film into camera, advance film to prepare for shooting, and unload film from camera. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED ENABLING OBJECTIVES

E2.1.1 Identify camera parts related to film loading/unloading, including the following: film advance lever, rewind button, rewind crank knob, film take-up spool, sprocket wheel, pressure plate, film counter gauge, and camera back.

E2.1.2 Define the function of each designated camera part.

E2.1.3 Outline procedure for loading and unloading a 35mm single lens reflex camera.

CRITERION-REFERENCED MEASURE

C2.1 Load 35mm film into 35mm single lens reflex camera, advance film to prepare for shooting, and unload film from camera. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Display diagrams of camera parts; have students explain function of parts (E2.1.1, E2.1.2).
2. Demonstrate how to load, advance, and unload films, using a 35mm camera; identify check points to ensure proper loading (E2.1.3).
3. Assign related reading in text and camera manual (E2.1.1-E2.1.3).
4. Have students practice loading and unloading a 35mm single lens reflex camera (E2.1.3).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm film (color or black and white)
Teacher-prepared diagram of camera parts

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Camera. Instructional Media Associates, Inc.
AV Program: Camera Systems. Instructional Media Associates, Inc.
Filmstrip/Cassette: Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 2. Joel A. Benedict.
Photography, 2nd ed., Chapter 2, Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 2, Charles Swedlund.

DUTY AREA

2. OPERATING AND MAINTAINING 35MM SINGLE LENS REFLEX CAMERA AND ACCESSORIES

TASK/COMPETENCY

2.2 Set ASA

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

2.2

PERFORMANCE OBJECTIVE

P2.2 Given a 35mm single lens reflex camera with a built-in meter and a roll of 35mm film, set proper ASA on camera. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED ENABLING OBJECTIVES

E2.2.1 Identify the ASA indicator on the camera.

E2.2.2 Describe and explain the function of the ASA indicator.

E2.2.3 Identify film manufacturer's ASA specifications on film pack and insert.

E2.2.4 Explain procedure for setting ASA on camera.

CRITERION-REFERENCED MEASURE

C2.2 Identify and set the proper ASA rating for a selected roll of film on a 35mm single lens reflex camera with a built-in meter. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Give students a vocabulary exercise on camera parts and functions, including the ASA indicator (E2.2.1, E2.2.2).
2. Demonstrate how to set the ASA indicator (E2.2.4).
3. Have students interpret manufacturer's specifications on film pack and insert (E2.2.3).
4. Assign related reading in text and camera manual (E2.2.1-E2.2.4).
5. Have students demonstrate correct procedure for setting ASA on camera (E2.2.4).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
35mm film (color or black and white) in package with film data information
Teacher-prepared diagram of camera parts

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Basic Picture-Taking Techniques (#649). The Center for Humanities, Inc.
Filmstrip/Cassette:	Exposure. Greystone Films, Inc.
Filmstrip/Cassette:	Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 1 and 2. Joel A. Benedict.
Photography, 2nd ed., Chapter 2. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 2. Charles Swedlund.

Application

DUTY AREA

2. OPERATING AND MAINTAINING 35MM SINGLE LENS REFLEX CAMERA AND ACCESSORIES

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

2.3 Load and unload a 35mm cassette

COURSE

Commercial Photography I (8607)

2.3

PERFORMANCE OBJECTIVE

P2.3 Given a 35mm film cassette, 35mm bulk film, bulk loader, tape, scissors, pen, and changing bag, load a 35mm film cassette. Performance must be 100 percent correct according to manufacturer's specifications and according to Checklist 2.3, Appendix E.

SELECTED ENABLING OBJECTIVES

E2.3.1 Identify the parts of a 35mm film cassette and bulk loader; explain function of each part.

E2.3.2 Observe demonstration on how to load a 35mm film cassette.

E2.3.3 Outline procedure for loading bulk loader, using manufacturer's specifications.

E2.3.4 Practice loading a 35mm film cassette and a bulk loader with bulk film.

CRITERION-REFERENCED MEASURE

C2.3 Load a 35mm film cassette with bulk film. Performance must be 100 percent correct according to manufacturer's specifications and according to Checklist 2.3, Appendix E.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Identify parts of 35mm film cassette and bulk loader; have students discuss function of each part (E2.3.1).
2. Show slide program on how to load a film cassette; supervise student practice (E2.3.2, E2.3.4).
3. Have students interpret manufacturer's specifications on bulk film package (E2.3.3).
4. Demonstrate how to load bulk loader with bulk film and supervise student practice (E2.3.4).

SELECTED TOOLS AND MATERIALS

Bulk loader
35mm bulk film (color or black and white)
35mm film cassettes
Masking tape
Scissors
Pen or marker
35mm camera

SELECTED AUDIOVISUAL MATERIALS

Teacher-prepared slide program on loading 35mm film cassettes

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 3 and 4. Joel A. Benedict.
Photography, 2nd ed., Chapter 4. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 4. Charles Swedlund.

—— Application ——

DUTY AREA

2. OPERATING AND MAINTAINING 35MM SINGLE LENS REFLEX CAMERA AND ACCESSORIES

TASK / COMPETENCY

2.4 Turn on and read in-camera meter

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

2.4

PERFORMANCE OBJECTIVE

P2.4 Given a 35mm single lens reflex camera with a built-in meter and a standard 18% neutral gray card, turn on in-camera meter and read results off of gray card. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED ENABLING OBJECTIVES

E2.4.1 Identify and describe the function of parts of a 35mm single lens reflex camera related to use of in-camera meter, including the following: meter switch, viewfinder, exposure indicator, aperture ring, shutter speed dial, and ASA indicator.

E2.4.2 Describe function of a standard 18% neutral gray card.

E2.4.3 Interpret manufacturer's specifications and demonstrate how to use ASA dial, meter switch, aperture ring, shutter speed dial, and in-viewfinder exposure indicator.

E2.4.4 Identify procedure for using an in-camera meter.

CRITERION-REFERENCED MEASURE

C2.4 Turn on in-camera meter and read results off of gray card. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Identify, using a diagram, the parts of a 35mm single lens reflex camera related to the in-camera meter; explain the function of each part; provide students with exercises on identification of parts (E2.4.1).
2. Demonstrate how to use a standard 18% neutral gray card (E2.4.2).
3. Demonstrate the use of the ASA dial, meter switch, aperture ring, and shutter speed dial; have students practice using these camera parts (E2.4.3).
4. Assign related reading in text and camera manual (E2.4.1-E2.4.4).
5. Have students practice turning on camera meter and reading results of in-viewfinder exposure indicator (E2.4.3, E2.4.4).
6. Have students demonstrate skill in using built-in meters on several types of cameras (E2.4.1-E2.4.4).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
Standard 18% neutral gray card
Camera batteries
Teacher-prepared diagram of camera parts

SELECTED AUDIOVISUAL MATERIALS

Filmstrip/Cassette:	Exposure. Greystone Films, Inc.
AV Program:	Exposure. Instructional Media Associates, Inc.
AV Program:	Lighting. Instructional Media Associates, Inc.
Filmstrip/Cassette:	Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual. Joel A. Benedict.
Photography, 2nd ed., Chapter 2. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 2. Charles Swedlund.

DUTY AREA

2. OPERATING AND MAINTAINING 35MM SINGLE LENS REFLEX CAMERA AND ACCESSORIES

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

2.5 Set shutter speed and adjust aperture

COURSE

Commercial Photography I (8607)

2.5

PERFORMANCE OBJECTIVE

P2.5 Given a 35mm single lens reflex camera with a built-in meter and a standard 18% neutral gray card, use the camera meter to set a specified shutter speed and to adjust aperture for correct exposure. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED ENABLING OBJECTIVES

E2.5.1 Identify the parts of a 35mm single lens reflex camera related to setting shutter speed and adjusting aperture, including the following: aperture, shutter, aperture ring, shutter speed dial, meter switch, viewfinder, exposure indicator, camera battery receptacle, and battery check mechanism.

E2.5.2 Describe the function of camera parts related to shutter speed and aperture adjustment for correct exposure.

E2.5.3 Describe the function of a standard 18% neutral gray card.

E2.5.4 Explain operation of meter, aperture ring, and shutter speed dial.

E2.5.5 Demonstrate how to use a standard 18% neutral gray card to determine exposure.

E2.5.6 Identify ways the shutter acts as a controller of light and as a controller of motion.

E2.5.7 Identify ways aperture acts as a controller of light and controller of depth of field; explain the relationship of shutter speed to aperture.

E2.5.8 List shutter speeds and f-stops.

CRITERION-REFERENCED MEASURE

C2.5 Set a specified shutter speed on a 35mm single lens reflex camera, using a standard 18% neutral gray card and meter, and adjust the aperture for correct exposure. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Identify, using a diagram, the parts of the camera related to setting shutter speed and adjusting aperture; have students explain function of each part (E2.5.1, E2.5.2).

2. Demonstrate function of a standard 18% neutral gray card (E2.5.3).

3. Demonstrate and explain operation of the meter, aperture ring, and shutter speed dial (E2.5.4).

4. Demonstrate how to use a gray card to determine proper exposure; supervise student practice in use of the gray card (E2.5.5).

5. Explain and discuss ways shutter speed controls light and motion (E2.5.5).

6. Explain and discuss ways aperture controls light and depth of field; explain and discuss relationship of shutter speed to aperture (E2.5.7).

7. Have students practice setting shutter speed and adjusting aperture (E2.5.1-E2.5.8).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
Standard 18% neutral gray card
Camera batteries
Teacher-prepared diagram of camera parts

SELECTED AUDIOVISUAL MATERIALS

Filmstrip/Cassette: Exposure. Greystone Films, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.
AV Program: Lighting. Instructional Media Associates, Inc.
Filmstrip/Cassette: Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 5,31, and 35. Joel A. Benedict.
Photography, 2nd ed., Chapter 2. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 2. Charles Swedlund.

Application

DUTY AREA

2. OPERATING AND MAINTAINING 35MM SINGLE LENS REFLEX CAMERA AND ACCESSORIES

TASK/COMPETENCY

2.6 Set aperture and adjust shutter speed

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

2.6

PERFORMANCE OBJECTIVE

P2.6 Given a 35mm single lens reflex camera with a built-in meter and a standard 18% neutral gray card, use the camera meter to set specified aperture and adjust the shutter speed for correct exposure. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED ENABLING OBJECTIVES

E2.6.1 Identify the parts of a 35mm single lens reflex camera related to setting aperture and adjusting shutter speed, including the following: aperture (f-stop) ring, shutter, shutter speed dial, meter switch, viewfinder, and exposure indicator.

E2.6.2 Describe the functions of camera parts related to setting aperture and adjusting shutter speed.

E2.6.3 Describe the function of a standard 18% neutral gray card.

E2.6.4 Explain operation of meter, aperture (f-stop) ring, and shutter speed dial.

E2.6.5 Identify ways shutter speed and aperture act together to determine exposure.

E2.6.6 Identify ways aperture acts as a controller of light and depth of field.

E2.6.7 List f-stops and shutter speeds.

CRITERION-REFERENCED MEASURE

C2.6 Set a specified aperture on a 35mm single lens reflex camera and adjust the shutter speed for correct exposure, using a standard 18% neutral gray card and camera meter. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Identify, using a diagram, the parts of the camera related to setting aperture and adjusting shutter speed; have students explain how each part functions (E2.6.1, E2.6.2).
2. Demonstrate how to use a standard 18% neutral gray card (E2.6.3).
3. Demonstrate the operation of the meter, aperture (f-stop) ring, and shutter speed dial (E2.6.4).
4. Demonstrate how to set aperture and how to use camera meter and gray card to adjust shutter speed for proper exposure (E2.6.5).
5. Show filmstrip on exposure and explain ways aperture and shutter speed act together to determine exposure (E2.6.6).
6. Assign related reading in text and camera manual (E2.6.1-E2.6.7).
7. Have students practice setting aperture and adjusting shutter speed (E2.6.1-E2.6.7).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
Standard 18% neutral gray card
Camera batteries
Teacher-prepared diagram of camera parts

SELECTED AUDIOVISUAL MATERIALS

Filmstrip/Cassette: Exposure. Greystone Films, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.
AV Program: Lighting. Instructional Media Associates, Inc.
Filmstrip Cassette: Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 5 and 31-35. Joel A. Benedict.
Photography, 2nd ed., Chapter 2. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 2. Charles Swedlund.

Application

DUTY AREA

2. OPERATING AND MAINTAINING 35MM SINGLE LENS REFLEX CAMERA AND ACCESSORIES

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

2.7 Frame, focus, and shoot picture

COURSE

Commercial Photography I (8607)

2.7

PERFORMANCE OBJECTIVE

P2.7 Given a 35mm single lens reflex camera loaded with black and white film, a simple subject in an evenly lit setting, and instructor's guidelines, frame, focus, and shoot a picture. Camera operation must be in accordance with manufacturer's specifications, and the finished photograph must be framed, focused, and exposed according to instructor's guidelines.

SELECTED ENABLING OBJECTIVES

E2.7.1 Identify and describe the function of the following 35mm single lens reflex camera parts: viewfinder, focusing ring, lens, shutter, shutter release, and shutter lock.

E2.7.2 Identify factors to consider when framing, focusing, and shooting a simple subject in an evenly lit setting, including the following: subject, camera position, type of camera and lens, lighting, and shutter speed and aperture setting.

E2.7.3 Frame and focus a variety of subjects in an evenly lit setting, using a 35mm single lens reflex camera.

E2.7.4 Demonstrate how to release the shutter of a 35mm single lens reflex camera to shoot a properly exposed picture.

E2.7.5 Identify the criteria for a properly exposed photograph, and demonstrate metering techniques.

E2.7.6 Identify procedure for framing, focusing, and shooting pictures.

CRITERION-REFERENCED MEASURE

C2.7 Frame, focus, and shoot a properly exposed photograph of a simple subject in an evenly lit setting, using a 35mm single lens reflex camera loaded with black and white film. Camera operation must in accordance with manufacturer's specifications, and the finished photograph must be framed, focused, and exposed according to instructor's guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Give students a vocabulary exercise on camera parts and functions, including those related to framing, focusing, and shooting pictures (E2.7.1).
2. Have students brainstorm factors to consider when framing, focusing, and shooting simple subjects in an evenly lit situation, using a 35mm single lens reflex camera; display examples of effective and ineffective shots (E2.7.2).
3. Review the use of shutter speed and aperture settings to produce a proper exposure (E2.7.2).
4. Demonstrate the mechanics of framing, focusing, and shooting; supervise student practice (E2.7.3, E2.7.4).
5. Illustrate and discuss the criteria for a properly exposed photograph; have students critique sample photographs for proper and improper exposure (E2.7.5).
6. Assign related reading in the text and camera manual (E2.7.1-E2.7.6).
7. Have students critique their work (E2.7.2, E2.7.5).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
Standard 18% neutral gray card
Simple subjects in evenly lit settings: (Example: A person's face in a typical classroom with florescent lighting)
35mm black and white film
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Basic Picture-Taking Techniques (#649). The Center for Humanities, Inc.
AV Program:	The Beginnings of Photographic Composition (#651). The Center for Humanities, Inc.
AV Program:	Composition. Instructional Media Associates, Inc.
Filmstrip/Cassette:	Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 1 and 6. Joel A. Benedict.
Photography, 2nd ed., Chapter 2. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 2. Charles Swedlund.

Application

DUTY AREA

2. OPERATING AND MAINTAINING 35MM SINGLE LENS REFLEX CAMERA AND ACCESSORIES

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

2.8 Rewind film

COURSE

Commercial Photography I (8607)

2.8

PERFORMANCE OBJECTIVE

P2.8 Given a loaded 35mm single lens reflex camera and manufacturer's specifications, rewind the film into the film cassette. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED ENABLING OBJECTIVES

E2.8.1 Identify and define the following terms: rewind crank, rewind button, sprockets, film take-up spool, 35mm cassette, and film tongue or leader.

E2.8.2 List checkpoints for proper rewinding technique:
a. Listening to film rewinding smoothly
b. Listening for tongue coming off take-up spool
c. Feeling film slacken at end of roll.

E2.8.3 Explain difference in rewinding procedure when rewinding and labeling a partially used roll of film.

E2.8.4 Interpret manufacturer's specifications for rewinding film.

CRITERION-REFERENCED MEASURE

C2.8 Rewind a roll of film into a film cassette, using a loaded 35mm single lens reflex camera. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Identify and explain function of camera parts related to rewinding of film in a 35mm single lens reflex camera; display diagram and provide students with a parts and function written exercise (E2.8.1).
2. Demonstrate how to rewind film, and discuss checkpoints for proper rewinding technique (E2.8.2).
3. Demonstrate how to label a partially used roll of film (E2.8.3).
4. Supervise student practice in rewinding film and labeling partially used rolls of film (E2.8.1-E2.8.4).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm film (color or black and white)
Teacher-prepared diagram of camera parts

SELECTED AUDIOVISUAL MATERIALS

AV Program:	The Camera. Instructional Media Associates, Inc.
Filmstrip/Cassette:	Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 2. Joel A. Benedict.
Photography, 2nd ed., Chapter 2. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 2. Charles Swedlund.

— Application —

DUTY AREA

2. OPERATING AND MAINTAINING 35MM SINGLE LENS REFLEX CAMERA AND ACCESSORIES

TASK/COMPETENCY

2.9 Maintain 35mm single lens reflex camera

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

2.9

PERFORMANCE OBJECTIVE

P2.9 Given a 35mm single lens reflex camera, manufacturer's specifications, and the necessary tools and materials, maintain the camera, keeping it in clean and proper working condition according to manufacturer's specifications.

SELECTED ENABLING OBJECTIVES

E2.9.1 Identify and explain the function of the following terms: lens release lever/button, lens rear and front elements, mirror, frosted glass focusing screen, battery receptacle, shutter curtain, viewfinder, lens brush, compressed air, lens tissue, lintless cloth or paper, lens cleaning liquid, camera batteries, meter battery, battery test indicator, U.V. filter, camera strap, lens cap, pressure plate, and film advance system.

E2.9.2 List major camera parts to be cleaned: lens, mirror, focusing screen, battery receptable, filter, viewfinder, and film advance.

E2.9.3 List major camera systems to be checked: focusing; shutter; metering; diaphragm; and film advance, rewind, and counter.

CRITERION-REFERENCED MEASURE

C2.9 Maintain 35mm single lens reflex camera, keeping it in clean and proper working condition according to manufacturer's specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Display equipment needed to clean and maintain a 35mm single lens reflex camera; provide students with a vocabulary list and maintenance diagrams (E2.9.1).
2. Demonstrate how to clean camera parts and how to prepare camera for use (E2.9.2).
3. Demonstrate how to check and maintain the following camera systems: focusing; shutter; metering; and film advance, rewind, and counter (E2.9.3).
4. Have students read and interpret manufacturer's specifications for cleaning and maintenance (E2.9.1-E2.9.3).
5. Provide students with time to practice camera maintenance (E2.9.1-(E2.9.3).
6. Assign related reading in text (E2.9.1-E2.9.3).
7. Have students demonstrate the proper pre-shooting maintenance routines (E2.9.1-E2.9.3).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with normal lens, U.V. filter,
lens cap, strap, and batteries
Lens brush
Compressed air
Lintless cloth or paper (photowipes)
Lens tissue
Lens cleaning liquid

SELECTED AUDIOVISUAL MATERIALS

AV Program:	The Camera. Instructional Media Associates, Inc.
Filmstrip/Cassette:	Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 1. Joel A. Benedict.
Photography, 2nd ed., Chapter 2. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 2. Charles Swedlund.

DUTY AREA

3. PLANNING AND SETTING UP SIMPLE SUBJECTS

TASKS/COMPETENCIES

3.1 Plan setting/background, composition, camera angle, and camera distance for a simple head-and-shoulders portrait with existing artificial light

3.2 Plan setting/background, composition, camera angle, camera distance, and lighting for a simple outdoor head-and-shoulders portrait in diffused sunlight

3.3 Plan setting, composition, camera angle, camera distance, and lighting for a simple outdoor head-and-shoulders portrait in bright or hazy sunlight

3.4 Plan setting/background, composition, camera angle, camera distance, and lighting for a series of outdoor portraits of one subject

3.5 Plan setting/background, composition, camera angle, camera distance, and single lamp lighting for a simple indoor head-and-shoulders close-up

3.6 Plan setting/background, composition, camera angle, camera distance, and lighting for a simple indoor portrait with window lighting

3.7 Plan location, setting, composition, camera angle, camera distance, and lighting for an informal small group portrait with existing indoor or outdoor light

3.8 Plan location, setting, composition, camera angle, camera distance, and lighting for a simple still life with one lamp plus reflector

DUTY AREA

3. PLANNING AND SETTING UP SIMPLE SUBJECTS

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

3.1 Plan setting/background, composition, camera angle, and camera distance for a simple head-and-shoulders portrait with existing artificial light

COURSE

Commercial Photography I (8607)

3.1

PERFORMANCE OBJECTIVE

P3.1 Given a tripod, a camera loaded with ASA 400 black and white film, an assigned subject, and a location with existing artificial light, plan the specific setting/background, composition, camera angle, and camera distance for a simple head-and-shoulders portrait with existing artificial light. At least two of the resulting photographs, as evaluated on a contact sheet, must receive a satisfactory rating on all four criteria.

SELECTED ENABLING OBJECTIVES

E3.1.1 Define the following terms: portrait; subject; light source, intensity, direction, and quality; even and uneven lighting; posing; head-and-shoulders; location; setting; background; composition; low, high, and eye-level camera angle; camera distance; horizontal format; vertical format; available light; and artificial light.

E3.1.2 Identify ways to evaluate the quality of existing light and how to consider lighting when selecting a setting.

E3.1.3 Identify guidelines for selecting an appropriate background for a variety of desired effects by examining a variety of sample portrait backgrounds.

E3.1.4 Determine effect of low, high, or eye-level camera angle on portrait composition.

E3.1.5 Identify effect of camera distance on portrait composition.

E3.1.6 Determine effects of framing format and use of frame space on composition by examining a variety of framed simple head-and-shoulders portraits.

E3.1.7 Draw a picture to illustrate a pleasing composition and use of frame space for a head-and-shoulders portrait, including choice of framing format; plan background, lighting, camera angle, and camera distance for the shot.

E3.1.8 Set up camera and tripod for a planned head-and-shoulders shot.

E3.1.9 Evaluate contact sheet to determine effectiveness of the shot.

CRITERION-REFERENCED MEASURE

C3.1 Plan an effective setting, composition, camera angle, and camera distance for a simple indoor head-and-shoulders portrait, using available indoor lighting. At least two of the resulting photographs, as evaluated on a contact sheet, must receive a satisfactory rating on all four criteria (See Critique Checklist, Appendix E).

SELECTED INSTRUCTIONAL ACTIVITIES

1. Define and discuss key terms and concepts related to planning and setting up head-and-shoulders portraits; provide students with vocabulary list; and assign textbook reading (E3.1.1).
2. Display sample portraits, and discuss and illustrate how variations in lighting, location, setting, composition, camera angle, camera distance, and framing format produce different effects (E3.1.2-E3.1.6).
3. Demonstrate how to plan and shoot a simple head-and-shoulders portrait with existing light (E3.1.1-E3.1.9).
4. Display sample negatives and contact sheets, and discuss ways to critique and evaluate effectiveness of a shot (E3.1.8).
5. Provide students with a specific shooting assignment, including objectives, materials required, step-by-step procedures, self-check list, and chart to record exposure data; supervise shooting simple head-and-shoulders portraits (E3.1.7, E3.1.8).
6. Have students process film and make contact prints (E3.1.9).
7. Have students critique one another's completed work to verify effectiveness of the work (E3.1.9).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
Tripod
35mm black and white film (ASA 400)
Standard 18% neutral gray card
Examples of former students' work
Teacher-prepared exposure data recording form
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Beginnings of Photographic Composition (#651). The Center for Humanities, Inc.
AV Program: Composition. Instructional Media Associates, Inc.
Examples in books: Joy of Photography (Time/Life photography series).
Slide presentation of winning work in Kodak's Annual Snapshot Awards Contest

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 29. Joel A. Benedict.
Lens and Shutter, Part 2, Chapter 1. Harvey Weiss.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.

DUTY AREA

3. PLANNING AND SETTING UP SIMPLE SUBJECTS

TASK / COMPETENCY

3.2 Plan setting/background composition, camera angle, and camera distance for a simple outdoor head-and-shoulders portrait in diffused sunlight

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

3.2

PERFORMANCE OBJECTIVE

P3.2 Given a camera loaded with ASA 400 black and white film, an assigned subject, and an outdoor location in diffused sunlight, plan the specific setting/background, composition, camera angle, camera distance, and direction of light for a simple outdoor head-and-shoulders portrait in diffused sunlight. At least two of the resulting photographs, as evaluated on a contact sheet, must receive a satisfactory rating on all five criteria.

SELECTED ENABLING OBJECTIVES

E3.2.1 Review the following terms: portrait, subject, light source, intensity, direction and quality; even and uneven lighting; posing; location; setting; background; composition; low, high, and eye-level camera angle; camera distance; horizontal format; vertical format; available light; existing light; and artificial light.

E3.2.2 Define the following terms: natural lighting; direct light; diffused light; frontal, side, and back lighting; open shade; direction of light; bright sun vs. overcast day; and harsh vs. gentle light quality.

E3.2.3 List two common options for diffused sunlight: open shade in bright sun and bright overcast (cloudy-bright).

E3.2.4 Demonstrate procedures for metering and using standard 18% neutral gray card.

E3.2.5 Identify factors to consider when selecting an outdoor location and background for a head-and-shoulders portrait.

E3.2.6 Review procedures for shooting, processing film, making a contact print, and making an enlargement.

E3.2.7 List steps in planning, setting up, and shooting a head-and-shoulders portrait in diffused sunlight.

E3.2.8 Critique and evaluate effectiveness of a print and negative.

CRITERION-REFERENCED MEASURE

C3.2 Plan the setting/background, composition, camera angle, camera distance, and direction of light for a simple outdoor head-and-shoulders portrait in diffused sunlight. At least two of the resulting photographs, as evaluated on a contact sheet, must receive a satisfactory rating on all five criteria. (See Critique Checklist, Appendix E.)

SELECTED INSTRUCTIONAL ACTIVITIES

1. Review, define, and discuss key terms and concepts related to planning and setting up shots in diffused sunlight; provide students with vocabulary lists; and assign reading in text (E3.2.1, E3.2.2).
2. Display sample head-and-shoulders portraits shot in diffused sunlight, and analyze setting/background, subject, composition, camera angle, camera distance, and lighting for each; discuss and illustrate the effect changes in setting/background, composition, camera angle, camera distance, and especially lighting can have on portraits (E3.2.1-E3.2.8).
3. Discuss types of diffused sunlight, including open shade in bright sun and bright overcast (cloudy-bright); discuss procedures for metering light and using a standard 18% neutral gray card (E3.2.3, E3.2.4).
4. Discuss factors to consider when selecting a location and background/setting for an outdoor portrait (E3.2.5).
5. Demonstrate how to plan, set up, and shoot a head-and-shoulders portrait in diffused sunlight (E3.2.6, E3.2.7).
6. Have students list steps in processing film, making a contact print, and making an enlargement (E3.2.6).
7. Provide students with a specific shooting assignment and instructions; supervise student practice in planning and setting up shots (E3.2.7).
8. Have students process film and make contact prints and enlargements (E3.2.6).
9. Have students display work and evaluate the effectiveness of one another's work (E3.2.6, E3.2.8).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
35mm black and white film (ASA 400)
Standard 18% neutral gray card
Examples of former students' work
Teacher-prepared exposure data recording form
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program:	The Beginnings of Photographic Composition (#651). The Center for Humanities, Inc.
AV Program:	Composition. Instructional Media Associates, Inc.
Examples in books:	Joy of Photography (Time/Life photography series).

Slide presentation of winning work in Kodak's Annual Snapshot Awards contest

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 6. Joel A. Benedict.
Lens and Shutter, Part 2, Chapter 1. Harvey Weiss.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.

Application

DUTY AREA
3. PLANNING AND SETTING UP SIMPLE SUBJECTS

PROGRAM
COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY
3.3 Plan setting, composition, camera angle, camera distance, and lighting for a simple outdoor head-and-shoulders portrait in bright or hazy sunlight

3.3

COURSE
Commercial Photography I (8607)

PERFORMANCE OBJECTIVE

P3.3 Given a camera loaded with ASA 125 black and white film, an assigned subject, and an outdoor location, plan the specific setting/background, composition, camera angle, camera distance, and direction of natural lighting for a simple outdoor head-and-shoulders portrait in bright or hazy sunlight. At least two of the resulting photographs, as evaluated on a contact sheet, must receive a satisfactory rating on all five criteria.

SELECTED ENABLING OBJECTIVES

E3.3.1 Review the following terms; portrait; subject; light source, intensity, direction, and quality; even and uneven lighting; posing; location; setting; background; composition; low, high, and eye-level camera angle; camera distance; horizontal format; vertical format; available light; existing light; artificial light; natural light; direct light; diffused light; frontal, side, and back lighting; open shade; bright sun vs. overcast day; and harsh vs. gentle light quality.

E3.3.2 Define the following terms: bright vs. hazy sun; deep overcast; fill-in flash; reflector; and natural reflector.

E3.3.3 Identify options for flattering portraits in bright sun, including open shade, back lighting, back lighting with fill-in flash, and use of natural reflector.

E3.3.4 List three feasible lighting methods suitable for specific outdoor shooting situations; plan and diagram the shot for each situation and method chosen.

E3.3.5 Demonstrate procedures for metering and using a standard 18% neutral gray card.

E3.3.6 Cite factors to consider when selecting an outdoor location and background for a head-and-shoulders portrait.

E3.3.7 Interpret a data sheet packed with film.

E3.3.8 Explain how to use daylight exposure rule of thumb to determine appropriate shutter speeds in standard outdoor lighting conditions at f/16.

E3.3.9 Determine shutter speed for each of the following conditions: extremely bright sun, normal or hazy sun, bright overcast, deep overcast, and open shade.

E3.3.10 Identify procedures for processing film, making a contact print, and making enlargements.

E3.3.11 Critique effectiveness of portraits shot in bright or hazy sun.

CRITERION-REFERENCED MEASURE

C3.3 Plan the setting/background, composition, camera angle, camera distance, and direction of natural lighting for a simple outdoor head-and-shoulders portrait in bright or hazy sunlight. At least two of the resulting photographs, as evaluated on a contact sheet, must receive a satisfactory rating on all five criteria. (See Critique Checklist, Appendix E.)

SELECTED INSTRUCTIONAL ACTIVITIES

1. Review, define, and discuss key terms and concepts related to planning and setting up simple outdoor head-and-shoulders portraits in bright or hazy sun (E3.3.1, E3.3.2).
2. Discuss lighting options in bright sunlight; describe, illustrate, or demonstrate appropriate methods to use with each condition (E3.3.3, E3.3.4).
3. Demonstrate how to plan and diagram shots for a variety of lighting options (E3.3.4).
4. Discuss procedures for metering and using a standard 18% neutral gray card (E3.3.5).
5. Discuss factors to consider when selecting an outdoor location and background for a head-and-shoulders portrait (E3.3.6).
6. Demonstrate how to read and interpret a data sheet packed with film and how to apply the daylight exposure rule of thumb; have students determine the appropriate shutter speed for each of the following conditions: extremely bright sun, normal or hazy sun, bright overcast, deep overcast, and open shade (E3.3.7-E3.3.9).
7. Demonstrate how to plan setting/background, location, composition, camera angle, camera distance, and lighting for an outdoor head-and-shoulders portrait; provide students with specific shooting assignment and instructions (E3.3.10).
8. Have students list steps in processing film, making a contact print, and making enlargements; have them process film, make contact prints and enlargements, and critique one another's work to verify effectiveness (E3.3.10, E3.3.11).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
35mm black and white film, including film data sheet (ASA 125)
Standard 18% neutral gray card
White cardboard reflector
Examples of former students' work
Teacher-prepared exposure data recording form
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Beginnings of Photographic Composition (#651). The Center for Humanities, Inc.
AV Program: Composition. Instructional Media Associates, Inc.
Examples in books: Joy of Photography (Time/Life photography series).
Slide presentation of winning work in Kodak's Annual Snapshot Awards contest

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 6. Joel A. Benedict.
Lens and Shutter, Part 2, Chapter 1. Harvey Weiss.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.

Application

DUTY AREA

3. PLANNING AND SETTING UP SIMPLE SUBJECTS

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

3.4 Plan setting/background, composition, camera angle, camera distance, and lighting for a series of outdoor portraits of one subject

3.4

COURSE

Commercial Photography I (8607)

PERFORMANCE OBJECTIVE

P3.4 Given a camera loaded with ASA 125 black and white film, an assigned subject, and an outdoor location with a variety of settings, plan the specific setting/background, composition, camera angle, camera distance, and lighting for a series of outdoor portraits of one subject, including close-ups, medium shots, full shots, and long shots. At least two of the resulting photographs for each type of shot, as evaluated on a contact sheet, must receive a satisfactory on all five criteria.

SELECTED ENABLING OBJECTIVES

E3.4.1 Review the following terms: portrait; subject; light source, intensity, direction, and quality; lighting; posing; location; setting; background; composition; low, high, and eye-level camera angle; camera distance; horizontal format; vertical format; available light; artificial light; natural light; direct light; diffused light; frontal, side, and back-lighting; bright sun vs. overcast day; and harsh vs. gentle light quality.

E3.4.2 Define the following terms: extreme close-up, head-and-shoulders close-up, medium shot, full shot, and long (establishing) shot; complete a stick-figure diagram of each type of shot, and explain how changes in camera distance affect viewer.

E3.4.3 Practice planning the setting/background, composition, camera angle, camera distance, and lighting for a series of outdoor portraits of one subject.

E3.4.4 Practice positioning camera and subject for each of the following shots: extreme close-up, head-and-shoulders close-up, medium shot, full shot, and long shot.

E3.4.5 Identify metering, film processing, contact print making, and enlarging procedures.

E3.4.6 Critique a series of outdoor portraits of one subject.

CRITERION-REFERENCED MEASURE

C3.4 Plan the specific setting/background, composition, camera angle, camera distance, and lighting for a series of outdoor portraits of one subject, including close-ups, medium shots, full shots, and long shots. At least two of the resulting photographs for each type of shot, as evaluated on a contact sheet, must receive a satisfactory rating on all five criteria. (See Critique Checklist, Appendix E.)

SELECTED INSTRUCTIONAL ACTIVITIES

1. Discuss key terms and concepts related to planning, setting up, and shooting a series of outdoor portraits of one subject (E3.4.1).

2. Provide students with diagrams of different types of shots; define and describe each shot; and explain how changes in camera distance and angle alter visual effect (E3.4.2).

3. Display samples series of outdoor portraits, and discuss factors to consider when planning, setting up, and shooting a series of outdoor portraits of one subject; demonstrate how to plan, set up, and execute the following shots: extreme close-up, head-and-shoulders close-up, medium shot, full shot, and long shot (E3.4.3, E3.4.4).

4. Review metering, film processing, contact print making, and enlarging procedures; have students enlarge their best shots (E3.4.5).

5. Demonstrate how to critique a series of outdoor portraits; have students evaluate the effectiveness of one another's work (E3.4.6).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
35mm black and white film, including film data sheet (ASA 125)
Standard 18% neutral gray card
White cardboard reflector
Examples of former students' work
Teacher-prepared exposure data recording form
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program:	The Beginnings of Photographic Composition (#651). The Center for Humanities, Inc.
AV Program:	Composition. Instructional Media Associates, Inc.
Examples in books:	Joy of Photography (Time/Life photography series).

Slide presentation of winning work in Kodak's Annual Snapshot Awards contest

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 29. Joel A. Benedict.
Lens and Shutter, Part 2, Chapter 1. Harvey Weiss.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.

DUTY AREA

3. PLANNING AND SETTING UP
SIMPLE SUBJECTS

TASK / COMPETENCY

3.5 Plan setting/background, composition, camera angle, camera distance, and single lamp lighting for a simple indoor head-and-shoulders close-up

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

3.5

PERFORMANCE OBJECTIVE

P3.5 Given a tripod, a camera loaded with ASA 400 black and white film, a reflector, an assigned subject, and a normally lit indoor location with one available artificial lamp light, plan the setting/background, composition, camera angle, camera distance, and lighting for a simple indoor head-and-shoulders close-up with single lamp lighting. At least two of the resulting photographs, as evaluated on a contact sheet, must receive a satisfactory rating on all five criteria.

SELECTED ENABLING OBJECTIVES

E3.5.1 Review the following terms: portrait; subject; light source, intensity, direction, and quality; lighting; posing; location; setting; background; composition; low, high, and eye-level camera angle; camera distance; horizontal format; vertical format; available light; artificial light; natural light; direct light; diffused light; frontal, side, and back-lighting; bright sun vs. overcast day; and harsh vs. gentle light quality.

E3.5.2 Demonstrate uses of a portable lamp when photographing an indoor portrait; complete a diagram to show proper position of lamp and cardboard reflector relative to subject and camera.

E3.5.3 Practice planning the setting/background, composition, camera angle, camera distance, and lighting for a simple indoor head-and-shoulders portrait, using a portable lamp.

E3.5.4 Identify metering, film processing, contact print making, and enlarging procedures.

E3.5.5 Critique indoor portraits shot with a portable lamp.

CRITERION-REFERENCED MEASURE

C3.5 Plan the setting/background, composition, camera angle, camera distance, and lighting for a simple indoor head-and-shoulders close-up, using single lamp lighting. At least two of the resulting photographs, as evaluated on a contact sheet, must receive a satisfactory rating on all five criteria. (See Critique Checklist, Appendix E.)

SELECTED INSTRUCTIONAL ACTIVITIES

1. Define and discuss key terms and concepts related to the planning, setting up, and shooting of simple indoor portraits and the use of portable lamps (E3.5.1).

2. Display sample indoor portraits shot with portable artificial light; have students describe conditions requiring the use of artificial light when shooting indoor portraits; demonstrate how to use a portable lamp and provide students with a diagram to illustrate proper position of lamp and cardboard reflector relative to subject and camera (E3.5.2).

3. Discuss factors to consider when planning, setting up, and shooting an indoor portrait with aid of a portable lamp; review and/or demonstrate required techniques (E3.5.3).

4. Review metering, film processing, contact print making, and enlarging procedures (E3.5.4).

5. Demonstrate how to critique indoor portraits shot with portable lamps; have students critique one another's completed work (E3.5.5).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
35mm black and white film (ASA 400)
Standard 18% neutral gray card
White cardboard reflector
Movable lamp fixture
Lampshade or diffuser (attachment)
Examples of former students' work
Teacher-prepared exposure data recording form
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Beginnings of Photographic Composition (#651). The Center for Humanities, Inc.
AV Program Composition. Instructional Media Associates, Inc.
Examples in books: Joy of Photography (Time/Life photography series).
Slide presentation of winning work in Kodak's Annual Snapshot Awards contest

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual. Joel A. Benedict
Lens and Shutter, Part 2, Chapter 1. Harvey Weiss.
Photography, 2nd ed. Barbara Upton and John Upton.

Application

DUTY AREA

3. PLANNING AND SETTING UP SIMPLE SUBJECTS

TASK/COMPETENCY

3.6 Plan setting/background, composition, camera angle, camera distance, and lighting for a simple indoor portrait with window lighting

3.6

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

PERFORMANCE OBJECTIVE

P3.6 Given a tripod, a camera loaded with ASA 400 black and white film, an assigned subject, a cardboard reflector, and an indoor location with window lighting, plan the specific setting/background, composition, camera angle, camera distance, and lighting for a simple indoor head-and-shoulders portrait with window lighting. At least two of the resulting photographs, as evaluated on a contact sheet, must receive a satisfactory rating on all five criteria.

SELECTED ENABLING OBJECTIVES

E3.6.1 Review the following terms: portrait; subject; light source, intensity, direction, and quality; even and uneven lighting; posing; location; setting; background; composition; low, high, and eye-level camera angle; distance; horizontal format; vertical format; available light; artificial light; natural light; direct light; diffused light; frontal, side, and backlighting; bright sun vs. overcast day; and harsh vs. gentle light quality.

E3.6.2 Define the following terms: filtered light, fill-in light, reflector, natural reflector, and three-quarter lighting.

E3.6.3 List and diagram two simple options for window-lit portraits:
a. Three-quarter lighting with reflector or fill-in light (using an existing light source)
b. Side lighting with reflector or fill-in light (using an existing light source)

E3.6.4 Demonstrate procedures for metering and using a standard 18% neutral gray card.

E3.6.5 Identify factors to consider when planning and setting-up simple head-and-shoulders portraits in window light.

E3.6.6 Demonstrate how to plan setting/background, composition, camera angle, camera distance, and lighting for simple indoor portrait with window lighting.

E3.6.7 Identify procedures for processing film, making a contact print, and making enlargements.

E3.6.8 Demonstrate how to critique a portrait shot in indoor window light.

CRITERION-REFERENCED MEASURE

C3.6 Plan the setting/background, composition, camera angle, camera distance, and lighting for a simple window-lit indoor head-and-shoulders portrait. At least two of the resulting photographs as evaluated on a contact sheet, must receive a satisfactory rating on all five criteria. (See Critique Checklist, Appendix E.)

SELECTED INSTRUCTIONAL ACTIVITIES

1. Define and discuss key terms and concepts related to planning and setting up an indoor portrait with window lighting; provide students with a vocabulary list; and assign textbook reading (E3.6.1, E3.6.2).

2. Identify and discuss window lighting techniques used with an existing light source; provide students with diagrams of 1) three-quarter lighting with fill-in light, 2) three-quarter lighting with reflector light, 3) side lighting with reflector light, and 4) side lighting with fill-in light (E3.6.3).

3. Discuss procedures for metering and using a standard 18% neutral gray card (E3.6.4).

4. Display sample indoor portraits, and discuss how changes in location, background/setting, composition, camera angle, camera distance, and lighting can vary viewer effect (E3.6.5).

5. Demonstrate how to plan, set up, and shoot a simple indoor portrait, using both three-quarter lighting and side lighting (E3.6.5, E3.6.6).

6. Review procedures for processing film, making a contact print, and making enlargements (E3.6.7).

7. Provide students with specific shooting assignments; hold workshops to get students started; and conduct group critique, using student displays of enlargements, negatives with overhead projector, and contact prints with opaque projector (E3.6.6, E3.6.8).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
35mm black and white film (ASA 400)
Standard 18% neutral gray card
White cardboard reflector
Opaque projector
Overhead projector
Examples of former students' work
Teacher-prepared exposure data recording forms
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Beginnings of Photographic Composition (#651). The Center for Humanities, Inc.
AV Program: Composition. Instructional Media Associates, Inc.
Examples in books: Joy of Photography (Time/Life photography series).
Slide presentation of winning work in Kodak's Annual Snapshot Awards contest

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 29 and 30. Joel A. Benedict.
Lens and Shutter, Part 2, Chapter 1. Harvey Weiss.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.

DUTY AREA

3. PLANNING AND SETTING UP SIMPLE SUBJECTS

TASK/COMPETENCY

3.7 Plan location, setting, composition, camera angle, camera distance, and lighting for an informal small group portrait with existing indoor or outdoor light

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

3.7

PERFORMANCE OBJECTIVE

P3.7 Given a camera loaded with ASA 400 or 125 black and white film, a small group of subjects, and an indoor or outdoor location with ample existing light, plan the location, specific setting/background, composition, camera angle, camera distance, and lighting for a series of three informal small group portraits. Each of the three photographs must receive a satisfactory rating on all six criteria.

SELECTED ENABLING OBJECTIVES

E3.7.1 Review the following terms: portrait; subject; light source, intensity, direction, and quality; even and uneven lighting; posing; location; setting; background; composition; low, high, and eye-level camera angle; distance; horizontal format; vertical format; available light; artificial light; natural light; direct light; diffused light; frontal, side, and back-lighting; bright sun vs. overcast day; and harsh vs. gentle light quality.

E3.7.2 Define the following terms: informal vs. formal portraits; candid, semi-candid, and posed shots; and small vs. large group portraits.

E3.7.3 Identify factors to consider when planning, setting up, and shooting informal outdoor and indoor portraits in existing light; review or demonstrate required procedures.

E3.7.4 Demonstrate how to plan, set up, and shoot an indoor and an outdoor small group portrait in existing light.

E3.7.5 Critique small group indoor and outdoor portraits shot in existing light.

CRITERION-REFERENCED MEASURE

C3.7 Plan the location, setting/background, composition, camera angle, camera distance, and lighting for a series of three informal group portraits shot with existing indoor or outdoor light. Each of the three photographs must receive a satisfactor rating on all six criteria (See Critique Checklist, Appendix E.)

SELECTED INSTRUCTIONAL ACTIVITIES

1. Define and discuss key terms and concepts related to indoor and outdoor small group portraiture; provide students with vocabulary lists; and assign textbook readings (E3.7.1, E3.7.2).

2. Display sample indoor and outdoor small group portraits shot in existing light; identify and discuss factors to consider when planning and setting up location, background/setting, composition, camera angle, camera distance, and lighting; review and/or demonstrate required procedures as needed (E3.7.3).

3. Provide students with specific shooting assignments and instructions; assist as needed (E3.7.4).

4. Demonstrate how to critique indoor and outdoor small group portraits shot in existing light; have students critique one another's completed work (E3.7.5).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
35mm black and white film (ASA 125 or 400)
Standard 18% neutral gray card
Examples of former students' work
Teacher-prepared exposure data recording form
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Beginnings of Photographic Composition (#651). The Center for Humanities, Inc.
AV Program: Composition. Instructional Media Associates, Inc.
Examples in books: Joy of Photography (Time/Life photography series).
Slide presentation of winning work in Kodak's Annual Snapshot Awards contest

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 29. Joel A. Benedict.
Lens and Shutter, Part 2, Chapter 1. Harvey Weiss.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.

DUTY AREA

3. PLANNING AND SETTING UP SIMPLE SUBJECTS

TASK/COMPETENCY

3.8 Plan location, setting, composition, camera angle, camera distance, and lighting for a simple still life with one lamp plus reflector

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

3.8

PERFORMANCE OBJECTIVE

P3.8 Given a camera loaded with ASA 125 black and white film, one or two still life objects, a single lamp, a reflector, and a seamless background paper roll, plan the location, background, composition, camera angle, camera distance, and lighting for a simple still life arrangement with one light plus reflector. At least two of the resulting photographs, as evaluated on a contact sheet, must receive a satisfactory rating on all six criteria.

SELECTED ENABLING OBJECTIVES

E3.8.1 Review the following terms: subject; light source, intensity, direction, and quality; even and uneven lighting; background; subject arrangement; composition; camera angle; distance; horizontal and vertical format; artificial light; frontal, side, and backlighting; main (key) light; fill light; reflector; shadow side; and depth of field.

E3.8.2 Arrange simple still life subjects, such as a single object or a small collection of objects, into a pleasing composition; select a camera format to correspond.

E3.8.3 Identify effect of lighting on the subject and its final effect in the photograph.

E3.8.4 Explain effect of depth of field; view examples shot at different aperture openings.

E3.8.5 Demonstrate how to plan, set up, and shoot a simple still life arrangement.

E3.8.6 Practice setting up various still life arrangements of a single object or small groups of objects.

E3.8.7 Demonstrate metering, using a reflected-light meter as well as a built-in camera meter with a standard 18% neutral gray card.

E3.8.8 Practice metering and setting exposure controls on camera.

E3.8.9 Photograph selected arrangements.

E3.8.10 Critique products of the practice session.

CRITERION-REFERENCED MEASURE

C3.8 Plan the location, background, composition, camera angle, camera distance, and lighting for a simple still life with one lamp plus reflector. At least two of the resulting photographs, as evaluated on a contact sheet must receive a satisfactory rating on all six criteria. (See Critique Checklist, Appendix E.)

SELECTED INSTRUCTIONAL ACTIVITIES

1. Define and discuss key terms and concepts related to still life photography and simple studio lighting; provide students with vocabulary lists; and assign reading in text (E3.8.1-E3.8.3).
2. Have students discuss factors to consider when planning and setting up still life arrangements (E3.8.2).
3. Have students discuss the effect of lighting on the appearance of the subject (E3.8.3).
4. Have students discuss depth of field and view the effect of changes in aperture, using a camera (E3.8.4).
5. Review metering, and have students practice metering procedures (E3.8.7, E3.8.8).
6. Have students select subjects for a still life photograph (E3.8.6).
7. Have students practice setting up various arrangements of still life subjects (E3.8.5, E3.8.6).
8. Have students photograph several arrangements and critique the results (E3.8.8-E3.8.10).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in meter
Hand-held exposure meter
35mm black and white film (ASA 125)
Standard 18% neutral gray card
Seamless background paper
Reflector and photoflood
White cardboard reflector
Examples of former students' work
Teacher-prepared exposure data recording form
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program: The Beginnings of Photographic Composition (#651). The Center for Humanities, Inc.
AV Program: Composition. Instructional Media Associates, Inc.
Examples of books: Joy of Photography (Time/Life photography series).
Slide Presentation of winning work in Kodak's Annual Snapshot Awards contest

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 6, 13, and 35. Joel A. Benedict.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 246-265. Charles Swedlund.

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASKS/COMPETENCIES

4.1 Use camera with built-in reflected-light meter and standard 18% neutral gray card

4.2 Calculate exposure with a hand-held reflected-light meter, using a standard 18% neutral gray card

4.3 Calculate exposure with an incident-light meter

4.4 Calculate exposure with a hand-held spot meter

4.5 Calculate exposure with a hand-held flash exposure meter

4.6 Estimate light level without use of meter or exposure chart and set camera exposure controls

4.7 Interpret exposure chart to estimate light and set camera exposure controls

4.8 Determine exposure with reflected-light meter, using the overall reading technique

4.9 Determine exposure with reflected-light meter, using palm-of-hand substitution technique

4.10 Determine exposure with reflected-light meter, using averaged-readings technique (luminance range)

4.11 Determine exposure, using the zone system technique of reading the textured shadow area in a scene with a normal luminance range

4.12 Determine exposure, using the zone system technique of reading a key tone in scene with a normal luminance range

4.13 Determine exposure, using an advanced zone system technique in a scene with a normal luminance range

4.14 Determine exposure, using an advanced zone system technique in low luminance range (flat) situations

4.15 Determine exposure, using an advanced zone system in high luminance range (contrasty) situations

4.16 Adjust camera exposure controls to compensate for reciprocity failure factor

4.17 Adjust camera exposure controls to compensate for filter factors

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASK/COMPETENCY

4.1 Use camera with built-in reflected-light meter and standard 18% neutral gray card

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

4.1

PERFORMANCE OBJECTIVE

P4.1 Given a 35mm single lens reflex camera with built-in reflected-light meter, a specific film, a standard 18% neutral gray card, and an average subject in a setting with typical outdoor or indoor lighting, take a meter reading and set camera for correct exposure to produce a normal negative. Selected setting must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.1.1 Identify and define the following exposure terms: standard 18% neutral gray card, middle gray, ASA setting, f-stop, shutter speed, meter switch, light-sensitive cell, camera battery, exposure indicator (needle or L.E.D. readout), average reading, reflected light, average subject, lighting, setting (scene), overexpose, underexpose, and bracketing.

E4.1.2 Identify and explain function of meter switch and exposure indicator on or in specified cameras.

E4.1.3 Operate camera controls related to exposure (ASA setting, f-stops, and shutter speeds).

E4.1.4 Demonstrate proper use of a standard 18% neutral gray card.

E4.1.5 Describe the mathematical relationship between changes in f-stop and shutter speed to achieve a given exposure.

E4.1.6 Identify types of built-in reflected-light meters.

E4.1.7 Use manufacturer's camera manual to identify the specific type of meter for a given camera.

CRITERION-REFERENCED MEASURE

C4.1 Use a built-in reflected-light meter on a 35mm single lens reflex camera and a standard 18% neutral gray card to take a meter reading and to set the camera exposure controls for a normal negative. Selected setting must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Assign reading in text related to exposure and parts of the camera (E4.1.1-E4.1.7).
2. Have students define and discuss key concepts and terms related to the measurement of light and the use of meters to determine exposure (E4.1.1).
3. Display camera, indicate location of meter switch and exposure indicator, and explain function of each part (E4.1.2).
4. Review location and function of camera controls; demonstrate how to operate camera controls related to exposure (ASA setting, f-stops, and shutter speeds) (E4.1.3).
5. Demonstrate and explain how to use and interpret a standard 18% neutral gray card (E4.1.4).
6. Display and discuss different types of built-in reflected-light meters (E4.1.6).
7. Discuss and demonstrate alternative methods of metering and demonstrate bracketing; have students practice these procedures (E4.1.7).
8. Have students practice taking built-in reflected-light meter readings and setting camera controls for a variety of situations (E4.1.1-E4.1.7).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with built-in reflected-light meter
Camera manual
Standard 18% neutral gray card
35mm film (color or black and white)
Teacher-prepared chart on types of meters

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program:	Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapter 5. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 5. Charles Swedlund.

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASK/COMPETENCY

4.2 Calculate exposure with a hand-held reflected-light meter using a standard 18% neutral gray card

—— Application ——

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

4.2

PERFORMANCE OBJECTIVE

P4.2 Given a hand-held reflected-light meter, a normally lit scene, a specified film, an average subject, and a standard 18% neutral gray card, take an average reading and calculate exposure for a normal negative. The calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.2.1 Identify and define the following exposure terms: overall reading, average tonal area, normally lit scene, average subject, standard 18% neutral gray card, middle gray, reflected light, reflected-light meter, incident light, incident-light meter, spot meter, ASA setting, f-stop, shutter speed, light-sensitive cell, meter battery, high and low light levels, gauge, scale, indicator needle, luminance, highlights, midtones, shadows, normal negative, overexpose, underexpose, exposure, and bracketing.

E4.2.2 Interpret manufacturer's manual to identify meter parts and to determine operating procedures.

E4.2.3 Explain differences among reflected-light, incident-light, and spot meters, and list appropriate uses of each type.

E4.2.4 Demonstrate proper use of standard 18% neutral gray card.

E4.2.5 Practice calculating correct exposure, using a hand-held reflected-light meter, for various films and lighting conditions.

E4.2.6 Compare the built-in reflected-light camera meter with the hand-held meter.

CRITERION-REFERENCED MEASURE

C4.2 Use a hand-held reflected-light meter and a standard 18% neutral gray card to calculate correct exposure for a normal negative. The calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to the measurement of light and the use of meters (E4.2.1).
2. Review how to use and interpret a standard 18% neutral gray card (E4.2.4).
3. Display various types of meters, describe distinguishing characteristics, and explain appropriate use of each type of meter (E4.2.2).
4. Identify parts of a hand-held reflected-light meter; demonstrate how to interpret manufacturer's specifications and how to use a hand-held meter with various films and lighting conditions (E4.2.4).
5. Assign reading in text (E4.2.1-E4.2.6).
6. Supervise student practice in taking exposure readings, using a variety of films and lighting conditions (E4.2.5).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera or 4"x5" view camera
Hand-held reflected-light meter
Hand-held incident-light meter
Spot meter
Standard 18% neutral gray card
35mm or 4"x5" sheet film (color or black and white)
Teacher-prepared chart/handouts on types of meters

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapter 5. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 5. Charles Swedlund.

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASK / COMPETENCY

4.3 Calculate exposure with an incident-light meter

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

4.3

PERFORMANCE OBJECTIVE

P4.3 Given a hand-held incident-light meter, a normally lit scene, a specified film, and an average subject, take a reading and calculate exposure to produce a normal negative. The calculation must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.3.1 Review the following exposure terms: standard 18% neutral gray card, middle gray, ASA setting, f-stop, shutter speed, meter switch, light-sensitive cell, camera battery, exposure indicator (needle or L.E.D. readout), average reading, reflected light, average subject, lighting, setting (scene), overexpose, underexpose, and bracketing.

E4.3.2 Identify and explain function of the diffusion disk or dome.

E4.3.3 Interpret manufacturer's manual to determine procedure for operating meter.

E4.3.4 Explain the differences among reflected-light, incident-light, and spot meters, and list appropriate uses of each type of meter.

E4.3.5 Demonstrate proper use of a standard 18% neutral gray card.

E4.3.6 Explain the relationship between the diffusion device over the light-sensitive cell and the standard 18% neutral gray card.

E4.3.7 Explain differences in the positioning and aiming of the meter in the incident-light versus the reflected-light metering techniques.

CRITERION-REFERENCED MEASURE

C4.3 Use a hand-held incident-light meter to take a reading and calculate exposure to produce a normal negative. The calculation must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

# SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to the measurement of light and the use of meters (E4.3.1, E4.3.2).
2. Review how to use and interpret a standard 18% neutral gray card (E4.3.5).
3. Display various types of meters, and explain appropriate use of each type (E4.3.4).
4. Identify parts of a hand-held incident-light meter; demonstrate how to interpret manufacturer's specifications and how to use an incident-light meter with various films and lighting conditions (E4.3.3).
5. Assign reading in test (E4.3.1-E4.3.7).
6. Supervise student practice in taking exposure readings, using a variety of films and lighting conditions (E4.3.1-E4.3.7).
7. Demonstrate differences in incident-light and reflected-light metering techniques; discuss key concepts related to metering techniques (E4.3.6, E4.3.7).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
Hand-held reflected-light meter
Hand-held incident-light meter
Spot meter
Standard 18% neutral gray card
35mm film (color or black and white)
Teacher-prepared chart/handouts on types of meters

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program:	Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapter 5. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 5. Charles Swedlund.

Application

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

4.4 Calculate exposure with a hand-held spot meter

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

4.4

PERFORMANCE OBJECTIVE

P4.4 Given a hand-held spot meter, a normally lit scene, a specified film, and an average subject, take a spot reading off a midtone area in the scene and calculate exposure to produce a normal negative. The calculation must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.4.1 Review the following exposure terms: standard 18% neutral gray card, middle gray, ASA setting, f-stop, shutter speed, meter switch, light-sensitive cell, camera battery, exposure indicator (needle or L.E.D. readout), average reading, reflected light, average subject, lighting, setting (scene), overexpose, underexpose, and bracketing.

E4.4.2 Interpret manufacturer's manual to determine procedure for operating meter.

E4.4.3 Explain differences among reflected-light, incident-light, and spot meters, and discuss appropriate uses of each type meter.

E4.4.4 Demonstrate proper use of a standard 18% neutral gray card.

E4.4.5 Demonstrate an understanding of the relationship between a standard 18% neutral gray card and the average or midtone areas in a scene.

E4.4.6 Identify parts of the subject or scene that are the midtone areas and would render an average reading of the total scene.

CRITERION-REFERENCED MEASURE

C4.4 Use a hand-held spot meter to take a reading off a midtone area in a scene and calculate exposure to produce a normal negative. The calculation must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to the measurement of light and the use of meters (E4.4.1, E4.4.5, E4.4.6).
2. Review how to use and interpret a standard 18% neutral gray card (E4.4.2).
3. Display various types of meters and explain appropriate use of each type (E4.4.3).
4. Identify parts of a hand-held spot meter; demonstrate how to interpret manufacturer's specifications and how to use a spot meter with various films and lighting conditions (E4.4.4).
5. Assign reading in text (E4.4.1-E4.4.6).
6. Supervise student practice in taking spot meter readings, using a variety of films and lighting conditions (E4.4.1-E4.4.6).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
Hand-held reflected-light meter
Hand-held incident-light meter
Spot meter
Standard 18% neutral gray card
35mm film (color or black and white)
Teacher-prepared chart/handout on types of meters

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapter 5. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 5. Charles Swedlund.

Application

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASK/COMPETENCY

4.5 Calculate exposure with a hand-held flash exposure meter

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

4.5

PERFORMANCE OBJECTIVE

P4.5 Given a hand-held flash exposure meter, a specified film, an average subject, and a setting, calculate exposure for a normal negative. The calculation must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.5.1 Identify and define the following exposure terms: standard 18% neutral gray card, middle gray, ASA setting, f-stop, shutter speed, exposure scale, mode indicator gauge with indicator needle or L.E.D. readout, light-sensitive cell, diffuser dome or disc, meter battery, flash p.c. cable, slave, camera X-synch socket, X-synchronized shutter speed, average reading, reflected light, incident light, reflected and incident-light modes, flash and non-flash modes, luminance, highlights, shadows, overexpose, underexpose, and bracketing.

E4.5.2 Demonstrate proper use of standard 18% neutral gray card.

E4.5.3 Determine differences in reflected-light and incident-light meters and identify appropriate uses of each type of meter.

E4.5.4 Interpret manufacturer's manual to identify meter parts and to determine procedure for operating meter.

E4.5.5 Review operation of common flash units and alternate modes of determining flash exposure.

E4.5.6 Practice taking readings and calculating exposure for an average negative in either the reflected-light or incident-light mode for a variety of films and lighting situations.

CRITERION-REFERENCED MEASURE

C4.5 Use a hand-held flash exposure meter to calculate correct exposure for a normal negative. The calculation must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to the measurement of light and the use of meters (E4.5.1).

2. Review how to use and interpret a standard 18% neutral gray card (E4.5.2).

3. Display various types of meters and explain appropriate use of each type of meter (E4.5.3).

4. Identify parts of a flash exposure meter; demonstrate how to interpret manufacturer's specifications and how to use a given meter in reflected-light and incident-light modes (E4.5.4).

5. Demonstrate how to use flash meter and selected flash equipment with various films, subjects, and photographic settings (E4.5.5).

6. Assign reading related to exposure (E4.5.1-E4.5.6).

7. Supervise student practice in taking flash-meter readings (E4.5.1-E4.5.6).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
Flash exposure meter
Standard 18% neutral gray card
Flash unit
35mm film (color or black and white)
Teacher-prepared chart/handouts on types of meters

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapters 5 and 9. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 5 and 9, pp. 119-135 and 255-260. Charles Swedlund.

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASK/COMPETENCY

4.6 Estimate light level without use of meter or exposure chart and set camera exposure controls

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

4.6

PERFORMANCE OBJECTIVE

P4.6 Given a specified film, an average subject, and an outdoor daylight lighting situation, estimate the light level and select the f-stop and shutter speed camera exposure settings, without use of meter or exposure chart, to produce a normal negative. Estimate of light level and selected camera exposure settings must be 100 percent correct for film type, subjects, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.6.1 Identify the following terms and concepts related to exposure: exposure, exposure chart, film ASA, ASA setting, built-in-meter, f-stop, shutter speed, average subject, lighting, existing light, setting (scene), midday daylight hours, underexpose, overexpose, bracketing, and pocket estimation guide.

E4.6.2 Interpret and recall information in an exposure estimation guide, writing from memory, all information contained in guide.

E4.6.3 Interpret existing light exposure chart, and cite recommended camera exposure settings for common existing lighting situations not covered in existing light exposure chart.

E4.6.4 Operate f-stop, shutter speed, and ASA setting camera exposure controls.

E4.6.5 Explain function of each camera exposure control.

E4.6.6 Describe the mathematical relationship between f-stop and shutter speed when determining exposure.

E4.6.7 List a variety of common daylight situations, including: very bright sun, bright sun, hazy sun, and cloudy bright.

E4.6.8 Practice photographing a variety of daylight outdoor lighting situations without use of a meter or an exposure estimation chart.

CRITERION-REFERENCED MEASURE

C4.6 Estimate light level and select the appropriate f-stop and shutter speed camera exposure settings, without use of a meter or exposure chart, to produce a normal negative. Estimation of light level and selected camera exposure settings must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to film, common lighting situations, exposure, and camera exposure controls (E4.6.1).

2. Provide students with a vocabulary list and exercise related to exposure (E4.6.1).

3. Assign readings in text (E4.6.1-E4.6.8).

4. Display and interpret an exposure estimation guide and explain its use; provide students with a copy of the guide; require students to memorize the guide and to pass a written exam (E4.6.2).

5. Demonstrate how to operate camera exposure controls, explain function of each control, and explain mathematical relationship between f-stop and shutter speed (E4.6.4-E4.6.6).

6. List and describe a variety of common daylight lighting situations; have students practice estimating light and setting camera exposure controls in a variety of outdoor daylight lighting situations without use of a meter or exposure estimation chart (E4.6.7, E4.6.8).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm black and white film (several types)
Pocket exposure estimation guide

SELECTED AUDIOVISUAL MATERIALS

AV Program: Exposure. Instructional Media Associates, Inc.
Teacher-prepared overhead transparency (or poster) of exposure estimation guide

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 5. Joel A. Benedict.
Master Photoguide, 8-78, AR-21. Kodak.
Kodak Professional Photoguide, 7-79, R-28. Kodak.
Photography, 2nd ed. Barbara Upton and John Upton.
Photography, 2nd ed. Charles Swedlund.

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASK/COMPETENCY

4.7 Interpret exposure chart to estimate light and set camera exposure controls

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

4.7

PERFORMANCE OBJECTIVE

P4.7 Given a specified film, an exposure chart, an average subject, and designated common lighting situations, estimate light level and select appropriate estimated f-stop and shutter speed settings to produce a normal negative for each lighting situation. All estimates and settings must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.7.1 Review the following terms and concepts related to exposure: exposure, exposure chart, film ASA, ASA setting, built-in meter, f-stop, shutter speed, average subject, lighting, existing light, setting (scene), midday daylight hours, underexpose, overexpose, and bracketing.

E4.7.2 Interpret film exposure chart, and cite manufacturer's recommendations for camera exposure settings in various weather and lighting situations.

E4.7.3 Interpret an existing light exposure chart, and cite recommended camera exposure settings for common existing lighting situations not covered in chart provided by manufacturer.

E4.7.4 List, describe, and identify common daylight lighting situations, including: very bright sun, bright sun, hazy sun, cloudy-bright, overcast, and open shade.

E4.7.5 Identify and explain location and function of f-stop, shutter speed, and ASA setting camera exposure controls.

E4.7.6 Operate each camera exposure control.

E4.7.7 Describe the mathematical relationship between f-stop and shutter speed when determining exposure.

E4.7.8 Practice estimating light level and selecting camera exposure setting for a variety of lighting situations, using an exposure chart.

CRITERION-REFERENCED MEASURE

C4.7 Estimate light level and select appropriate estimated f-stop and shutter speed settings to produce normal negatives, using an exposure chart. All estimates and settings must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to film, common lighting situations, exposure, and camera exposure controls (E4.7.1).
2. Assign readings in text (E4.7.1-E4.7.8).
3. Display sample exposure charts; demonstrate how to read, interpret, and use the different exposure charts; demonstrate use of existing light exposure charts, including those found in pre-packed films (E4.7.2, E4.7.3).
4. Provide students with actual and photographic examples of common outdoor daylight situations; have them identify a variety of lighting situations (E4.7.4).
5. Demonstrate how to select various f-stop and shutter speed combinations to produce exposures equivalent to those recommended on the exposure chart; explain mathematical relationship between f-stop and shutter speed (E4.7.5-E4.7.7).
6. Have students practice estimating light levels and selecting appropriate camera exposure charts (E4.7.8).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm black and white film (several types)
Exposure charts for various types of black and white film
   (found in Kodak's Master Photoguide or similar reference)
Existing light exposure chart (found in Kodak's Master Photoguide or
   similar reference)

SELECTED AUDIOVISUAL MATERIALS

AV Program: Exposure. Instructional Media Associates, Inc.
Teacher-prepared overhead transparency (or poster) of exposure estimation guide

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 5. Joel A. Benedict.
Kodak Professional Photoguide, 7-79, R-28. Kodak
Master Photoguide, 8-78, AR-21. Kodak
Photography, 2nd ed. Barbara Upton and John Upton.
Photography, 2nd ed. Charles Swedlund.

Application

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK / COMPETENCY

4.8 Determine exposure with reflected-light meter, using the overall reading technique

COURSE

Commercial Photography I (8607)

4.8

PERFORMANCE OBJECTIVE

P4.8 Given a hand-held reflected-light meter, a normally lit scene, a specified film, and an average subject, use the overall reading technique and a reflected-light meter to calculate the correct exposure to produce a normal negative. Calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.8.1 Identify and define the following exposure terms: overall reading, average tonal area, normally lit scene, average subject, standard 18% neutral gray card, middle gray, reflected light, reflected-light meter, incident light, incident-light meter, spot meter, ASA setting, f-stop, shutter speed, light-sensitive cell, meter battery, high and low light levels, gauge, scale, indicator needle, luminance, highlights, midtones, shadows, normal negative, overexpose, underexpose, exposure, and bracketing.

E4.8.2 Interpret manufacturer's manual to determine meter operating procedure.

E4.8.3 Explain differences among reflected-light, incident-light, and spot meters, and state the appropriate uses for each type of meter.

E4.8.4 Demonstrate proper use of a standard 18% neutral gray card.

E4.8.5 Identify parts of the subject or scene that are average or midtone areas and would render an average reading of the total scene.

CRITERION-REFERENCED MEASURE

C4.8 Use a reflected-light meter and the overall reading technique to calculate the correct exposure to produce a normal negative. Calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to the measurement of light and the use of meters (E4.8.1).
2. Review how to use and interpret a standard 18% neutral gray card (E4.8.4).
3. Have students list several average tonal/midtone areas in a scene that can be read without use of a gray card (E4.8.5).
4. Have students list several tonal areas to avoid when taking one-step overall readings of a scene (Examples: windows, the sky, and dark subjects) (E4.8.5).
5. Demonstrate incorrect methods of taking overall readings, using Polaroid black and white film (E4.8.1-E4.8.5).
6. Have students analyze results of incorrect reading methods (E4.8.3).
7. Assign reading in the text (E4.8.1-E4.8.5).
8. Supervise student practice of the overall reading technique (E4.8.1-E4.8.5).

SELECTED TOOLS AND MATERIALS

Hand-held reflected-light meter
Standard 18% neutral gray card
4"x5" view camera with Polaroid back
Polaroid black and white film
Kodak Gray Scale

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapter 5. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 5. Charles Swedlund.

——— Application ———

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

4.9 Determine exposure with reflected-light meter, using palm-of-hand substitution technique

COURSE

Commercial Photography I (8607)

4.9

PERFORMANCE OBJECTIVE

P4.9 Given a hand-held reflected-light meter, a normally lit scene, a specified film, and an average subject, use a reflected-light meter and the palm-of-hand substitution technique to calculate the correct exposure to produce a normal negative. Calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.9.1 Review exposure terms (refer to E4.8.1).

E4.9.2 Define and describe the palm-of-hand substitution method of metering.

E4.9.3 Interpret manufacturer's manual to determine meter operating procedure.

E4.9.4 Demonstrate proper use of a standard 18% neutral gray card.

E4.9.5 Explain the difference between the palm-of-hand skin tone and the gray card reading techniques in terms of luminance and difference in readings (one f-stop difference).

E4.9.6 Explain the relationship between one f-stop overexposure and the resulting tones in the negative and final print.

E4.9.7 Adjust the f-stop (or shutter speed) from an initial metered palm-of-hand reading to obtain the correct exposure for a normal negative.

CRITERION-REFERENCED MEASURE

C4.9 Calculate the correct exposure to produce a normal negative, using a hand-held reflected-light meter and the palm-of-hand substitution technique. Calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to the measurement of light and the use of meters (E4.9.1, E4.9.2).
2. Review how to use and interpret a standard 18% neutral gray card (E4.9.3).
3. Have students list substitute tonal areas that can be used instead of a gray card (E4.9.4).
4. Discuss the merits of using the palm-of-hand technique instead of a gray card for metering (E4.9.2).
5. Demonstrate, using Polaroid film, the difference between the gray card and the palm-of-hand techniques; demonstrate how to make adjusted readings; have students analyze results of demonstration (E4.9.5).
6. Assign reading in text (E4.9.1-E4.9.7).
7. Have students take a quiz on key concepts and terms related to metering and the use of the palm-of-hand technique (E4.9.1-E4.9.7).
8. Supervise student practice in taking palm-of-hand readings in various lighting situations (E4.9.6).

SELECTED TOOLS AND MATERIALS

Hand-held regular or spot reflected-light meter
Standard 18% neutral gray card
4"x5" view camera with Polaroid back
Polaroid black and white film

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapter 5. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 5. Charles Swedlund.

Application

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASK/COMPETENCY

4.10 Determine exposure with reflected-light meter, using averaged-readings technique (luminance range)

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

4.10

PERFORMANCE OBJECTIVE

P4.10 Given a hand-held reflected-light meter, a normally lit scene, a specified film, and an average subject, use a reflected-light meter and the averaged-readings (luminance range) technique to calculate the correct exposure to produce a normal negative. Calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.10.1 Review terms related to exposure (refer to E4.8.1).

E4.10.2 Define the following terms: highlight and shadow detail, textured highlight and shadow, luminance range, and averaged readings.

E4.10.3 Read and interpret manufacturer's manual to determine procedure for operating meter.

E4.10.4 Demonstrate proper use of standard 18% neutral gray card.

E4.10.5 Identify the textured shadow and textured highlight areas of a specified scene.

E4.10.6 Demonstrate the difference between the gray card and the textured shadow and highlight areas in terms of luminance and meter readings.

E4.10.7 Use the reflected-light meter to read the textured highlight and shadow areas.

E4.10.8 Explain the concept of "averaging."

E4.10.9 Practice "averaging" the textured highlight and shadow readings, using the scale on the exposure meter as well as the f-stop settings and the shutter speed settings.

CRITERION-REFERENCED MEASURE

C4.10 Use a hand-held reflected-light meter and the averaged-readings (luminance range) technique to calculate the correct exposure to produce a normal negative. Calculations must be 100 percent correct for film type, subject, and lighting situation, as required by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to the measurement of light and the use of meters (E4.10.1, E4.10.2).
2. Have students review how to use and interpret a standard 18% neutral gray card (E4.10.4).
3. Demonstrate the selection of textured highlight and shadow areas and the metering of these areas (E4.10.5).
4. Demonstrate the difference between the gray card reading and the textured highlight and shadow readings (E4.10.6).
5. Demonstrate, with Polaroid film, the use of unadjusted vs. averaged readings off of textured highlight and shadow areas for determining exposure; have students analyze results of demonstration (E4.10.7).
6. Demonstrate the procedure for "averaging" the textured highlight and shadow readings to yield the proper exposure (E4.10.8).
7. Assign reading in text (E4.10.1-E4.10.9).
8. Supervise student practice in using the averaged-readings technique (E4.10.1-E4.10.9).

SELECTED TOOLS AND MATERIALS

Hand-held reflected-light meter
Standard 18% neutral gray card
4"x5" camera with Polaroid back
Polaroid black and white film

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapter 5. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 5. Charles Swedlund.

—— Application ——

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASK / COMPETENCY

4.11 Determine exposure, using the zone system technique of reading the textured shadow area in a scene with a normal luminance range

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

4.11

PERFORMANCE OBJECTIVE

P4.11 Given a regular or spot reflected-light meter, a standard 18% neutral gray card, a normally lit scene, an average subject (a normal luminance range), and a specified film, use the zone system technique of reading the textured shadow area in a scene to calculate the correct exposure to produce a normal negative. Calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.11.1 Review key terms and concepts related to exposure (refer to E4.8.1).

E4.11.2 Define the following terms: zone system, zones, highlight and shadow detail, textured highlight and shadow areas, key tone, and luminance range.

E4.11.3 Demonstrate proper use of a standard 18% neutral gray card.

E4.11.4 Explain differences among reflected-light, incident-light, and spot meters, and state the appropriate uses of each type of meter.

E4.11.5 Define and explain Ansel Adam's Zone System.

E4.11.6 Identify the textured shadow area of a given scene.

E4.11.7 Explain the difference between the gray card and the textured shadow area in terms of luminance and meter readings.

E4.11.8 Identify the five zones for negatives and prints across which all textures will appear.

E4.11.9 Demonstrate how to adjust the initial reading of a textured shadow area in order to render the tone properly and to produce a normal negative.

CRITERION-REFERENCED MEASURE

C4.11 Use a regular or spot reflected-light meter and the zone system technique of reading the textured shadow area of a scene to calculate the correct exposure to produce a normal negative. Calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review key terms and concepts related to exposure and zone system reading techniques (E4.11.1, E4.11.2).

2. Have students review use of standard 18% neutral gray card (E4.11.3).

3. Review uses and operation of reflected-light, incident-light, and spot meters (E4.11.4).

4. Discuss the merits of using the zone system technique of reading textured shadow areas for determining exposure (E4.11.5).

5. Have students identify the textured shadow areas in a variety of scenes (E4.11.6).

6. Illustrate and describe the five negative and print zones across which all textures will appear (E4.11.8).

7. Demonstrate, using black and white Polaroid film, the differences between the gray card and textured shadow area techniques; have students analyze and compare results of demonstration (E4.11.7).

8. Demonstrate, using black and white Polaroid film, the differences between adjusted and unadjusted readings of textured shadow areas; have students analyze results of demonstration (E4.11.9).

9. Supervise students practice in taking textured shadow area readings in various lighting situations (E4.11.1-E4.11.9).

SELECTED TOOLS AND MATERIALS

Hand-held regular or spot reflected-light meter
Standard 18% neutral gray card
4"x5" view camera with Polaroid back
Polaroid black and white film
Examples of subject with obvious textured shadow areas
Kodak Gray Scale

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Control and Command: Exposure as a Creative Force. Media Loft, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapters 5 and 11. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 5 and 10. Charles Swedlund.
The Zone System for 35mm Photographers. Carson Graves.

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

4.12 Determine exposure, using the zone system technique of reading a key tone in a scene with a normal luminance range

COURSE

Commercial Photography II (8608)

4.12

PERFORMANCE OBJECTIVE

P4.12 Given a regular or spot reflected-light meter, a normally lit scene, an average subject (normal luminance range), and a specified film, use the zone system technique of reading the key tone in the scene to calculate the correct exposure to produce a normal negative. Calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.12.1 Review exposure terms (refer to E4.8.1).

E4.12.2 Review key terms and concepts related to the zone system technique (refer to E4.11.2).

E4.12.3 Demonstrate proper use of a standard 18% neutral gray card.

E4.12.4 Explain the Ansel Adam's Zone System.

E4.12.5 Identify the key tones in specified scenes.

E4.12.6 Explain the difference between the selected key tones and a standard 18% neutral gray card in terms of luminance and meter reading.

E4.12.7 Explain the relationship between one f-stop additional or less exposure and the resulting tones in the final negative and final prints in the context of the zone system.

CRITERION-REFERENCED MEASURE

C4.12 Use a regular or spot reflected-light meter and the zone system technique of reading key tone to calculate the correct exposure to produce a normal negative. Calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to the measurement of light, the use of meters, and the zone system (E4.12.1-E4.12.3).

2. Review how to use and interpret a standard 18% neutral gray card (E4.12.3).

3. Have students list possible key tones in a variety of scenes (Example: snow in a winter scene) (E4.12.5).

4. Discuss the merits of using the zone system key tone method of metering (E.4.12.4).

5. Demonstrate, using black and white Polaroid film, the difference between the use of the gray card and a selected, specific key tone to determine exposure; have students analyze results of demonstration (E4.12.6).

6. Assign reading in text (E4.12.1-E4.12.7).

7. Supervise student practice in taking key tone readings in various lighting situations (E4.12.1-E4.12.7).

SELECTED TOOLS AND MATERIALS

Hand-held regular or spot reflected-light meter
Standard 18% neutral gray card
4"x5" view camera with Polaroid back
Polaroid black and white film
Examples of subjects with obvious key tones
Kodak Gray Scale

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Control and Command: Exposure as a Creative Force. Media Loft, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapters 5 and 11. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 5 and 10. Charles Swedlund.
The Zone System for 35mm Photographers. Carson Graves.

Application

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

4.13 Determine exposure, using an advanced zone system technique in a scene with a normal luminance range

COURSE

Commercial Photography II (8608)

4.13

PERFORMANCE OBJECTIVE

P4.13 Given a regular or spot reflected-light meter, a normally lit scene, an average subject (normal luminance range), and a specified film, use an advanced zone system technique of first, reading either the textured shadow or the key tone to calculate the correct exposure, and second, reading the luminance range to determine whether the normal film development procedure should be used to produce a normal negative. Calculations and determinations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.13.1 Review key terms and concepts related to exposure (refer to E4.8.1).

E4.13.2 Review key terms and concepts related to the zone system technique (refer to E4.11.2).

E4.13.3 Define the following terms: normal development, underdevelopment, and overdevelopment.

E4.13.4 Demonstrate proper use of a standard 18% neutral gray card.

E4.13.5 Interpret manufacturer's manual to determine operating procedures for handheld or spot reflected-light meter.

E4.13.6 Explain the Ansel Adam's Zone System, its merits and applications.

E4.13.7 Use the textured shadow area or key tone method of the zone system technique for determining exposure.

CRITERION-REFERENCED MEASURE

C4.13 Use a regular or spot reflected-light meter and an advanced zone system technique in a scene with a normal luminance range to calculate the correct exposure and to determine whether the normal film development time should be used to produce a normal negative. Calculations and determinations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review key terms and concepts related to the measurement of light, the use of meters, and the zone system (E4.13.1-E4.13.3).
2. Review how to use and interpret a standard 18% neutral gray card (E4.13.4).
3. Have students demonstrate how to use hand-held and spot reflected-light meters (E4.13.5).
4. Discuss the merits of using the zone system technique of metering both for the main exposure and the luminance range of the scene for greater control over the total process of exposure and development (E4.13.6).
5. Demonstrate how to take the main readings in normal luminance, using the zone system method of textured shadow or key tone metering and a second luminance range metering; have students analyze and compare results (Note: Use standard black and white film and normal black and white papers with normal and differential development times.) (E4.13.6, E4.13.7).
6. Assign reading in text (E4.13.1-E4.13.7).
7. Supervise student practice in taking advanced zone system readings in a variety of normal lighting situations (E4.13.1-E4.13.7).

SELECTED TOOLS AND MATERIALS

Hand-held regular or spot reflected-light meter
Standard 18% neutral gray card
35mm single lens reflex camera
35mm black and white film
Photoflood lights with diffusers
Seamless background paper
Kodak Gray Scale

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Control and Command: Exposure as a Creative Force. Media Loft, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapters 5 and 11. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 5 and 10. Charles Swedlund.
The Zone System for 35mm Photographers. Carson Graves.

Application

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

4.14 Determine exposure, using an advanced zone system technique in low luminance range (flat) situations

COURSE

Commercial Photography II (8608)

4.14

PERFORMANCE OBJECTIVE

P4.14 Given a regular or spot reflected-light meter, a flatly lit scene or flat subject (low luminance range), and a specified film, use an advanced zone system technique of first, reading either the textured shadow or the key tone to calculate the correct exposure, and second, reading the luminance range to estimate the film development procedure to produce a normal negative. Calculations and estimations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.14.1 Review key terms and concepts related to exposure (refer to E4.8.1).

E4.14.2 Review key terms and concepts related to the zone system technique (refer to E4.11.2).

E4.14.3 Define the following terms: normal development, underdevelopment, and overdevelopment.

E4.14.4 Demonstrate proper use of a standard 18% neutral gray card.

E4.14.5 Interpret manufacturer's manual to determine operating procedures for handheld or spot reflected-light meter.

E4.14.6 Explain the Ansel Adam's Zone System, its merits and applications.

CRITERION-REFERENCED MEASURE

C4.14 Use a regular or spot reflected-light meter and an advanced zone system technique in a flat (low luminance range) situation to calculate the correct exposure and estimate film development procedure to produce a normal negative. Calculations and estimations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review key terms and concepts related to exposure, light meters, and zone system techniques (E4.14.1-E4.14.3).
2. Review how to use and interpret a standard 18% neutral gray card (E4.14.4).
3. Have students demonstrate how to use hand-held and spot reflected-light meters (E4.14.5).
4. Discuss the merits of using the zone system technique of metering in flat (low luminance range) lighting and subject situations (E4.14.6).
5. Demonstrate how to take the main reading in low luminance range situations, using the zone system method of textured shadow or key tone metering and a second luminance range metering; have students analyze and compare results (Note: Use standard black and white film and normal black and white papers with differential film development times--overdevelopment for flat scenes.) (E4.14.1-E4.14.6).
6. Assign readings in text (E4.14.1-E4.14.6).
7. Supervise student practice in taking advanced zone system readings in a variety of flat lighting situations (E4.14.1-E4.14.6).

SELECTED TOOLS AND MATERIALS

Hand-held regular or spot reflected-light meter
Standard 18% neutral gray card
35mm single lens reflex camera
35mm black and white film
Photoflood lights with diffusers
Seamless background paper
Kodak Gray Scale

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Control and Command: Exposure as a Creative Force. Media Loft, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapters 5 and 11. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 5 and 10. Charles Swedlund.
The Zone System for 35mm Photographers. Carson Graves.

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASK / COMPETENCY

4.15 Determine exposure, using an advanced zone system in high luminance range (contrasty) situations

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

4.15

PERFORMANCE OBJECTIVE

P4.15 Given a regular or spot reflected-light meter, a contrasty lighting situation or subject (high luminance range), and a specified film, use an advanced zone system technique of first, reading either the textured shadow or the key tone to calculate the correct exposure, and second, reading the luminance range to estimate the film development procedure to produce a normal negative. Calculations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.15.1 Review key terms and concepts related to exposure (refer to E4.8.1).

E4.15.2 Review key terms and concepts related to the zone system technique (refer to E4.11.2).

E4.15.3 Define the following terms: normal development, underdevelopment, and overdevelopment.

E4.15.4 Demonstrate proper use of a standard 18% neutral gray card.

E4.15.5 Interpret manufacturer's manual to determine operating procedures for hand-held or spot reflected-light meter.

E4.15.6 Explain the Ansel Adam's Zone System, its merits and applications.

CRITERION-REFERENCED MEASURE

C4.15 Use a regular or spot reflected-light meter and an advanced zone system technique in a contrasty (high luminance range) situation to calculate the correct exposure and estimate film development procedure to produce a normal negative. Calculations and estimations must be 100 percent correct for film type, subject, and lighting situation, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review key terms and concepts related to exposure, light meters, and zone system technique (E4.15.1-E4.15.3).

2. Review how to use and interpret a standard 18% neutral gray card (E4.15.4).

3. Have students demonstrate how to use hand-held and spot reflected-light meters (E4.15.5).

4. Discuss the merits of using the zone system technique of metering in contrasty (high luminance range) lighting and subject situations (E4.15.6).

5. Demonstrate how to take the main readings in high luminance range situations, using the zone system method of textured shadow or key tone metering and a second luminance range meter; have students analyze and compare results (Note: Use standard black and white film and normal black and white papers with differential film development times--underdevelopment for contrasty scenes.) (E4.15.1-E4.15.6).

6. Assign reading in text (E4.15.1-E4.15.6).

7. Supervise student practice in taking advanced zone system readings in a variety of contrasty situations (E4.15.1-E4.15.6).

SELECTED TOOLS AND MATERIALS

Hand-held regular or spot reflected-light meter
Standard 18% neutral gray card
35mm single lens reflex camera
35mm black and white film
Photoflood lights with diffusers
Seamless background paper
Kodak Gray Scale

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Control and Command: Exposure as a Creative Force. Media Loft, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapters 5 and 11. Barbara Upton and John Upton
Photography, 2nd ed., Chpaters 5 and 10. Charles Swedlund.
The Zone System for 35mm Photographers. Carson Graves.

Application

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

4.16 Adjust camera exposure controls to compensate for reciprocity

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

4.16

PERFORMANCE OBJECTIVE

P4.16 Given a hand-held meter, a 35mm single lens reflex camera, a designated film, a scene with a low existing light level, a reciprocity failure factor chart, and an initial meter reading indicating an exposure longer than a second, adjust camera exposure controls to compensate for the reciprocity failure factor due to extensive exposure time. Adjusted camera settings must compensate for the reciprocity failure factor with 100 percent accuracy, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.16.1 Identify and define the following terms related to reciprocity failure and exposure: factor reciprocity, reciprocity failure factor, low light level, time exposure, normal exposure, underexposure, overexposure, "bracketing," f-stop, shutter speed, ASA, under/overexposure control, and existing light exposure chart.

E4.16.2 Interpret a reciprocity failure factor chart in the Kodak Master Photoguide or similar reference.

E4.16.3 Interpret an existing light exposure meter.

E4.16.4 Demonstrate correct use of a hand-held exposure meter.

E4.16.5 Calculate factors, using both whole and fractional numbers, and adjust f-stop, shutter speed, ASA, and under/overexposure control (if available).

E4.16.6 Practice "bracketing" in low existing light situations.

CRITERION-REFERENCED MEASURE

C4.16 Adjust camera exposure controls correctly from the initial reading given by the hand-held meter to compensate for the reciprocity failure factor due to excessive exposure time. Adjusted camera setting must compensate for the reciprocity failure factor with 100 percent accuracy, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to reciprocity failure factor and exposure time (E4.16.1).
2. Provide students with mathematical problems on calculating failure factors (E4.16.5).
3. Supervise student practice in using a reciprocity failure factor chart (E4.16.2).
4. Supervise student practice in using an existing light exposure chart (E4.16.3).
5. Demonstrate method for "bracketing"; provide students with opportunities to practice "bracketing" (E4.16.6).
6. Give students a low existing light photographic assignment (E4.16.1-E4.16.6).
7. Assign related reading in text (E4.16.1-E4.16.6).
8. Supervise student practice in adjusting camera exposure controls to compensate for reciprocity failure factor (E4.16.1-E4.16.6).

SELECTED TOOLS AND MATERIALS

Hand-held exposure meter
35mm single lens reflex camera
35mm black and white film
Reciprocity failure chart (found in Kodak's Master Photoguide or similar reference)
Existing light exposure chart (found in Kodak's Master Photoguide or similar reference)

SELECTED AUDIOVISUAL MATERIALS

Transparency of existing light exposure chart
Transparency of reciprocity failure chart

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-78, AR-21. Kodak.
Photography, 2nd ed., Chapter 5. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 5. Charles Swedlund.

DUTY AREA

4. DETERMINING EXPOSURE AND OPERATING METERS

TASK/COMPETENCY

4.17 Adjust camera exposure controls to compensate for filter factors

— Application —

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

4.17

PERFORMANCE OBJECTIVE

P4.17 Given a hand-held meter, a 35mm single lens reflex camera, a designated film, a filter, and an initial meter reading of the scene, adjust the camera exposure controls (f-stop, shutter speed, ASA setting, and under/overexposure control, if available) to compensate for the filter factor. Adjusted camera settings must compensate for filter factor with 100 percent accuracy, as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E4.17.1 Identify and define the following terms related to filter factor and exposure: filter, filter factor, f-stop, shutter speed, ASA, under/overexposure control, exposure, normal exposure, and bracketing.

E4.17.2 Interpret manufacturer's filter factor specifications on the rim of the filter and on the data sheet accompanying the filter.

E4.17.3 Demonstrate correct use of a hand-held exposure meter.

E4.17.4 Calculate factors, using both whole and fractional numbers and both f-stop and shutter speed settings.

E4.17.5 Operate f-stop, shutter speed, ASA, and under/overexposure controls correctly.

E4.17.6 Use filter(s) other than standard ultraviolet/haze filter.

CRITERION-REFERENCED MEASURE

C4.17 Adjust the camera exposure controls correctly from the initial reading given by the hand-held meter to compensate for the filter factor. Adjusted camera settings must compensate for filter factor with 100 percent accuracy, as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Define and discuss key concepts and terms related to filter factors and exposure (E4.17.1).
2. Provide students with mathematical problems on calculating filter factors (E4.17.4).
3. Supervise student practice in using various filters which require compensation for the filter factor; have students use the data sheet which accompany filters to obtain further information (E4.17.2).
4. Give students a photographic assignment requiring the use of a filter other than the standard ultraviolet/haze filter (E4.17.6).

SELECTED TOOLS AND MATERIALS

Hand-held exposure meter
35mm single lens reflex camera
35mm film (color or black and white)
Assorted filters
Example of a filter data sheet (found in Kodak's Master Photoguide or similar reference)

SELECTED AUDIOVISUAL MATERIALS

Transparency of a filter data sheet

SELECTED REFERENCES

Photography, 2nd ed. Barbara Upton and John Upton.
Photography, 2nd ed. Charles Swedlund.

DUTY AREA

5. USING CAMERA CONTROLS AND ACCESSORIES FOR CREATIVE EFFECT

TASKS/COMPETENCIES

5.1 Select and use shutter speed technique

5.2 Select and use aperture setting for depth of field

5.3 Select and use focusing technique

5.4 Select and use filters

5.5 Select and use lenses

Application

DUTY AREA

5. USING CAMERA CONTROLS FOR CREATIVE EFFECT

TASK/COMPETENCY

5.1 Select and use shutter speed technique

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

5.1

PERFORMANCE OBJECTIVE

P5.1 Given a 35mm single lens reflex camera, a specified film, and designated subjects, select and use appropriate shutter speed techniques to capture or express motion. At least two of the resulting photographs must be 90 percent correct according to teacher's written specifications.

SELECTED ENABLING OBJECTIVES

E5.1.1 Identify and define the following terms related to camera shutter speed control: shutter, leaf vs. focal plane shutter, bulb, time exposure, stop action, freeze action, flash-freeze action, flash-synch speed, open flash, intentional blur, camera motion, subject motion, panning, peak-of-action, angle or direction of subject motion, time lapse, zooming, multiple exposure, ASA, f-stop, and equivalent exposure.

E5.1.2 Identify, describe, and analyze effects of common shutter techniques.

E5.1.3 Demonstrate and practice a variety of shutter speed techniques.

E5.1.4 Explain relationship of shutter speed to f-stops in calculating equivalent exposures.

E5.1.5 Select an appropriate shutter speed for stopping motion, freezing motion, freezing with flash, blurring intentionally, and using camera with tripod and cable release.

E5.1.6 Process film and produce and mount enlargements of photographs that capture or express motion.

CRITERION-REFERENCED MEASURE

C5.1 Select and use an appropriate shutter speed technique to capture or express motion. At least two of the resulting photographs must be 80 percent correct according to teacher's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to shutter speed techniques and exposure (E5.1.1).
2. Assign reading in text (E5.1.1-E5.1.6).
3. Demonstrate a variety of shutter speed techniques; discuss factors to consider when selecting an appropriate shutter speed technique (E5.1.2, E5.1.3).
4. Display a variety of photographic examples that capture or express motion; have students analyze photographs in terms of effect and shutter speed technique (E5.1.2).
5. Have students practice calculating equivalent exposures, using several shutter speed and f-stop combinations (E5.1.4).
6. Have students collect photographic examples that illustrate designated shutter speed techniques (E5.1.2).
7. Give students a photographic exercise, using a variety of shutter speed techniques, including stop action, freeze action, and intentional blur; have students critique results of exercise (E5.1.2, E5.1.3, E5.1.5).
8. Have students process film, produce and edit a contact sheet, and produce and critique a minimum of one enlargement that captures or expresses motion; have them mount their best enlargements for inclusion in portfolios (E5.1.6).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm film (color or black and white)
Tripod
Cable release
Examples of photographs that capture or express emotion
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared specificatons on shutter speed techniques

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	Advanced Tools for Beginning Photographers. Media Loft, Inc.
Filmstrip/Cassette:	Exposure. Graystone Films, Inc.
AV Program:	Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Assignments 31-34. Joel A. Benedict.
Photography, 2nd ed., pp. 32-45 and 314-315. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 42-48. Charles Swedlund.

Application

DUTY AREA

5. USING CAMERA CONTROLS FOR CREATIVE EFFECT

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

TASK/COMPETENCY

5.2 Select and use aperture setting for depth of field

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

5.2

PERFORMANCE OBJECTIVE

P5.2 Given a 35mm single lens camera, a specified film, and a designated subject and setting, select and use aperture for an appropriate depth of field for each of several renderings of the subject. Included must be a subject isolated by selective focus, subject with setting suggested but not defined, and subject with setting clearly defined. Each of the three resulting photographs must be 100 percent correct according to teacher's written specifications.

SELECTED ENABLING OBJECTIVES

E5.2.1 Identify and define the following terms related to the camera's setting: aperture; f/stop; diaphragm; depth of field; depth of field scale; shallow, medium, and deep depths of field; distance scale; stop-down or preview function; setting (scene); foreground; background; focus; out-of-focus; circles of confusion; focal plane; selective focus; tripod; and cable release.

E5.2.2 Identify examples of varying depths of field.

E5.2.3 Explain how lens-to-subject distance, lens focal length, and other factors determine depth of field.

E5.2.4 Identify steps in selection of appropriate aperture settings to vary depth of field for the same subject and setting.

E5.2.5 Explain relationship of shutter speed to f-stop in calculating equivalent exposures.

E5.2.6 Process film and produce and mount enlargements of photographs that illustrate variations in depth of field.

CRITERION-REFERENCED MEASURE

C5.2 Select and use aperture settings for an appropriate depth of field for each of several renderings of a designated subject, including subject isolated by selective focus, subject with setting suggested but not defined, and subject with setting clearly defined. Each of the three resulting photographs must be 100 percent correct according to teacher's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to aperture setting (E5.2.1).
2. Identify and discuss factors affecting depth of field, and demonstrate ways to select and use aperture setting for various desired effects (E5.2.2-E5.2.4).
3. Have students analyze photographic examples that illustrate variations in the use of aperture and depth of field, including subjects isolated by selective focus, subjects with setting suggested but not defined, and subject with setting clearly defined (E5.2.2-E5.2.4).
4. Have students collect photographic examples that illustrate different depths of field and aperture settings (E5.2.2).
5. Have students practice calculating equivalent exposures, using several shutter speed and f-stop combinations (E5.2.5).
6. Give students an assignment to photograph a subject and setting, using large, medium, and small apertures for shallow, medium, and deep depths of field (E5.2.4).
7. Have students process film, produce and edit a contact sheet, and produce and critique a minimum of three photographs that illustrate variations in depth of field for the same subject and setting; have them mount their best enlargements for inclusion in portfolios (E5.2.6).

SELECTED TOOLS AND MATERIALS

33mm single lens reflex camera
35mm film (color or black and white)
Tripod
Cable release
Examples of photographs that illustrate various uses of aperture and depth of field
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared specifications on aperture settings for depth of field

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program: Basic Picture-Taking Techniques (#649). The Center for Humanities, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Lesson 35. Joel A. Benedict.
Photography, pp. 32-45 and 64-65. Barbara Upton and John Upton.
Photography, pp. 49-51 and 84-87. Charles Swedlund.

— Application —

DUTY AREA

5. USING CAMERA CONTROLS FOR CREATIVE EFFECT

TASK / COMPETENCY

5.3 Select and use focusing technique

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

5.3

PERFORMANCE OBJECTIVE

P5.3 Given a 35mm single lens reflex camera, a specified film, and designated subjects, select and use the appropriate focusing technique for maximum efficiency in capturing three kinds of subjects, including subject to be isolated, defined area of activity, and a scene including infinity. Each of the three resulting photographs must be 100 percent correct according to teacher's written specifications.

SELECTED ENABLING OBJECTIVES

E5.3.1 Identify and define the following terms related to focusing: lens, aperture, f-stop, depth of field, selective focus, zone focus, hyperfocal focus, out-of-focus, soft-focus, soft-focus lens, diffusion, lens flare, circles of confusion, focal plane, distance scale, depth of field scale, and stop-down or preview function.

E5.3.2 Identify examples of various focusing techniques.

E5.3.3 Identify appropriate focusing technique for several subjects, including: a subject to be isolated (selective focus), a defined area of activity (zone focus as in a sports event), and a scene including infinity (hyperfocal focus as in a landscape).

E5.3.4 Explain the relationship of focus to depth of field, aperture, lens focal length, and lens-to-camera distance.

E5.3.5 Calculate equivalent exposures, and explain the relationship of shutter speed to f-stop.

E5.3.6 Demonstrate and practice a variety of focusing techniques.

E5.3.7 Process film and produce and mount enlargements of photographs that illustrate selective focus, zone focus, and hyperfocal focus.

CRITERION-REFERENCED MEASURE

C5.3 Select and use the appropriate focusing technique for maximum efficiency in capturing three kinds of subjects, including subject to be isolated, defined area of activity, and a scene including infinity. Each of the three resulting photographs must be 100 percent correct according to teacher's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to focusing techniques (E5.3.1).
2. Illustrate and describe a variety of focusing techniques; have students analyze photographic examples that illustrate selective focus, zone focus, hyperfocal focus, and other focusing techniques (E5.3.2).
3. Identify and discuss factors affecting selection of focusing techniques; demonstrate selected techniques (E5.3.2-E5.3.4).
4. Have students collect examples of photographs that illustrate different focusing techniques (E5.3.2).
5. Have students practice calculating equivalent exposures, using several shutter speed and f-stop combinations (E5.3.5).
6. Give students a photographic exercise requiring the use of selective focusing, zone focusing, and hyperfocal focusing; have students critique results of exercise (E5.3.6).
7. Have students process film, produce and edit a contact sheet, and produce and critique enlargements depicting different focusing techniques; have them mount their best enlargements for inclusion in portfolios (E5.3.6).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm film (color or black and white)
Tripod
Cable release
Examples of photographs that illustrate various focusing techniques
Teacher-prepared specifications on focusing techniques

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program:	Basic Picture-Taking Techniques (#649). The Center for Humanities, Inc.
AV Program:	Exposure. Instructional Media Associates, Inc.
Filmstrip/Cassette:	Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapters 2 and 3, pp. 32-45. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 2 and 3, pp. 40-41 and 85-87. Charles Swedlund.

DUTY AREA

5. USING CAMERA CONTROLS FOR CREATIVE EFFECT

TASK/COMPETENCY

5.4 Select and use filters

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

5.4

PERFORMANCE OBJECTIVE

P5.4 Given a 35mm single lens reflex camera, a designated black and white film, and a selection of filters, select one or more filters or related lens attachments and use correctly for a creative effect. At least two of the resulting photographs must be 100 percent correct according to teacher's written specifications.

SELECTED ENABLING OBJECTIVES

E5.4.1 Identify and define the following terms related to the use of filters: filter, filter factor, absorb, transmit, reflect, ultraviolet, haze, polarizing, neutral density, skylight, diffusion, soft-focus, cross-screen (star-effect), tone, contrast, gelatin, and filter holder (lens attachments).

E5.4.2 Identify various filters and describe their effects.

E5.4.3 Interpret data on filter ring and on chart enclosed in most filter packages or on other reference charts.

E5.4.4 Identify appropriate filter for a specific effect.

E5.4.5 Calculate filter factor.

E5.4.6 Demonstrate use of designated filter or lens attachment for creative effect.

E5.4.7 Process film and produce and mount enlargements of photographs that illustrate appropriate use of filters and lens attachments for creative effect.

CRITERION-REFERENCED MEASURE

C5.4 Select one or more filters or related lens attachments and use correctly for a creative effect. At least two of the resulting photographs must be 100 percent correct according to teacher's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to filters and lens attachments (E5.4.1).
2. Display filters and lens attachments, demonstrate their uses, and discuss their effects (E5.4.2).
3. Have students analyze photographic examples of various filter effects (E5.4.2).
4. Have students collect photographic examples to illustrate filter and lens attachment effects (E5.4.2-E5.4.4).
5. Demonstrate how to read and interpret manufacturer's specifications (E5.4.3).
6. Demonstrate how to calculate filter factors; have students practice calculating filter factors for selected situations (E5.4.5).
7. Give students a photographic exercise requiring use of at least one filter or lens attachment for creative effect, excluding the ultraviolet-haze and skylight filters (E5.4.3, E5.4.4, E5.4.6).
8. Have students process film, produce and edit a contact sheet, and produce a minimum of one enlargement that illustrates use of filter(s) and lens attachment(s) for creative effect; have students critique their work and mount their best enlargements for inclusion in portfolios (E5.4.7).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm black and white film
Selection of filters and lens attachments (including filter holders)
Examples of photographs that illustrate various filter effects
Teacher-prepared specifications on use of filters

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Advanced Tools for Beginning Photographers. Media Loft, Inc.
AV Program: Lighting. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, pp. 122-127, Assignment 37. Joel A. Benedict.
Photography, 2nd ed., pp. 98-101. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 110-117. Charles Swedlund.

DUTY AREA

5. USING CAMERA CONTROLS FOR CREATIVE EFFECT

TASK/COMPETENCY

5.5 Select and use lenses

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

5.5

PERFORMANCE OBJECTIVE

P5.5 Given a 35mm single lens reflex camera, a specified film, and designated subjects, select and use the appropriate lenses for effective photographic images. At least three of the resulting photographs must be 100 percent correct according to teacher's specifications.

SELECTED ENABLING OBJECTIVES

E5.5.1 Identify and define the following terms related to lenses: simple lens, compound lens, focus, light rays, refraction, convex, concave, focal point, focal plane, focal length, angle of view, magnification, perspective, depth of field, distortion, normal lens, long lens, short lens, telephoto, wide-angle, flare, resolving power, lens speed, f-number, zoom, variable focal length lens, macro lens, soft-focus lens, screw mount, bayonet mount, interchangeable, and stop-down or preview function.

E5.5.2 Demonstrate correct use of the normal lens.

E5.5.3 Identify the main types of lenses--their characteristics and recommended uses.

E5.5.4 Identify the lens used for each photograph in a selection of examples.

E5.5.5 Attach and remove lenses from camera body.

E5.5.6 Cite slowest recommended shutter speed with hand-held lens according to lens focal length.

E5.5.7 Identify procedure for selecting and using non-normal lenses for creative effect.

E5.5.8 Process film and produce and mount enlargements that illustrate use of lenses.

CRITERION-REFERENCED MEASURE

C5.5 Select and use the appropriate lenses for designated subjects to produce effective photographic images. At least three of the resulting photographs must be 100 percent correct according to teacher's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to lenses (E5.5.1-E5.5.3).
2. Have students analyze and discuss photographic examples illustrating effects of different lenses (E5.5.4).
3. Demonstrate and have students practice changing lenses (E5.5.5).
4. Explain rule for minimum shutter speed with a hand-held lens (minimum hand-held shutter speed = lens focal length or nearest shutter speed); have students memorize and cite rule (E5.5.6).
5. Give students a photographic exercise requiring the use of non-normal lenses for creative effect (E5.5.7).
6. Have student process film, produce and edit a contact sheet, and produce a minimum of one enlargement; have them mount and include their best enlargements in portfolios (E5.5.8).
7. Have students critique the results of exercise (E5.5.7).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm film (color or black and white)
Selection of interchangeable lenses
Lens accessories (including lens shade or hood and lens cap)
Tripod (for use with long lenses)
Examples of photographs that illustrate effects of different lenses
Teacher-prepared specifications on use of lenses

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	Advanced Tools for Beginning Photographers. Media Loft, Inc.
Slide/Tape:	Time, Place, and Subjects: Responding to the Moment. Media Loft, Inc.
Filmstrip/Cassette:	Using the Camera. Greystone Films, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapters 3 and 12, pp. 250-255. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 3. Charles Swedlund.

DUTY AREA

6. OPERATING AND MAINTAINING VIEW CAMERA

TASKS/COMPETENCIES

6.1 Load and unload sheet film into holders

6.2 Adjust camera to compensate for bellows extension

6.3 Adjust camera to compensate for distorted perspective

6.4 Use ground glass to adjust focus

6.5 Maintain view camera

Application

DUTY AREA

6. OPERATING AND MAINTAINING
VIEW CAMERA

TASK/COMPETENCY

6.1 Load and unload sheet film

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

6.1

PERFORMANCE OBJECTIVE

P6.1 Given 4" x 5" sheet film and a 4" x 5" film holder, load and unload film into holder. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED ENABLING OBJECTIVES

E6.1.1 Identify and define the following terms: emulsion, base, notch patterns, film pack, light leaks, film holder, dark slide, compressed air, and camel hair brush.

E6.1.2 Show how to interpret film notch code.

E6.1.3 Identify film emulsion side.

E6.1.4 Interpret film manufacturer's specifications to determine procedure for loading and unloading sheet film into holders.

E6.1.5 Practice loading and unloading film into holder.

CRITERION-REFERENCED MEASURE

C6.1 Load and unload 4" x 5" sheet film into 4" x 5" film holder. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on common 4" x 5" film and film holder terms and discuss (E6.1.1).
2. Show how to identify and interpret notch codes for different films (E6.1.2).
3. Demonstrate how to identify proper film emulsion side and how to load and unload 4" x 5" film into film holder (E6.1.3-E6.1.5).
4. Demonstrate how to read and interpret film specifications (E6.1.4).
5. Assign reading in text (E6.1.1-E6.1.5).

SELECTED TOOLS AND MATERIALS

4" x 5" film holder complete with dark slides
4" x 5" film
Compressed air
Camel hair brush
Film box and specifications
Teacher-prepared chart/handouts on notch code identification system for films
Teacher-prepared chart on loading and unloading sheet film

SELECTED AUDIOVISUAL MATERIALS

AV Program: Darkroom Tools and Techniques. Instructional Media Associates, Inc.
Slide/Tape: The Weston Eye: Composition, Detail, and the Large Format Image. Media Loft, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapter 10. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 11. Charles Swedlund.

Application

DUTY AREA

6. OPERATING AND MAINTAINING VIEW CAMERA

TASK/COMPETENCY

6.2 Adjust camera to compensate for bellows extension

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

6.2

PERFORMANCE OBJECTIVE

P6.2 Given a 4" x 5" view camera and necessary accessories, a hand-held meter, and a subject for a large format shot, focus, take meter reading, and adjust camera to compensate for bellows extension. Performance must be 100 percent correct according to manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E6.2.1 Identify and define the following terms: bellows, focal length, lens extension factor, reciprocity, magnification, lens to film distance, and lens extension exposure dial.

E6.2.2 Interpret a Kodak lens extension exposure dial.

E6.2.3 Calculate change in distance and apply distance change to extension dial.

CRITERION-REFERENCED MEASURE

C6.2 Take an exposure reading with a hand-held meter for a large format shot, and adjust the exposure to compensate for bellows extension. Performance must be 100 percent correct according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students discuss key terms and concepts related to bellows extension; provide students with vocabulary list (E6.2.1).
2. Demonstrate how to read and interpret a Kodak lens extension exposure dial (E6.2.2).
3. Explain how to calculate change in distance change and how to apply distance change to extension dial; have students practice making calculations and changes in extension dial (E6.2.3).
4. Supervise student practice in adjusting camera to compensate for bellows extension (E6.2.1-E6.2.3).

SELECTED TOOLS AND MATERIALS

4" x 5" view camera with lens, black cloth, and tripod
Measuring rule
Bellows extension exposure dial

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: The Weston Eye: Composition, Detail, and the Large Format Image.
Media Loft, Inc.

SELECTED REFERENCES

Kodak Professional Photoguide, 7-79, R-28. Kodak.
Master Photoguide, 8-7S, AR-21. Kodak.
Photography, 2nd ed., Chapter 10. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 11. Charles Swedlund.

Application

DUTY AREA

6. OPERATING AND MAINTAINING
VIEW CAMERA

TASK / COMPETENCY

6.3 Adjust camera to compensate for distorted perspective

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

6.3

PERFORMANCE OBJECTIVE

P6.3 Given a 4" x 5" view camera with lens, black cloth, magnification loupe, tripod, and subject, compensate for distortions, focus, and adjust controls to control perspective. Performance must be 100 percent correct according to manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E6.3.1 Identify by name and define the function of the following controls on a 4" x 5" view camera: lens board adjustment, front standard adjustment, back adjustment, and back standard adjustment.

E6.3.2 Describe uses of front and back standard movements, including rise and fall, tilt, and swing.

E6.3.3 Practice adjustment of controls.

E6.3.4 Demonstrate how to use focusing cloth and loupe, and identify their functions.

E6.3.5 Demonstrate ways to deal with vignetting and other distortions.

E6.3.6 Practice focusing and adjusting controls of a 4" x 5" view camera to control perspective.

CRITERION-REFERENCED MEASURE

C6.3 Adjust controls of a 4" x 5" view camera to control perspective, and compensate for distortions. Performance must be 100 percent correct according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Display view camera and diagrams and identify control knobs; have students discuss function of each control and key concepts related to perspective and distortion (E6.3.1).
2. Demonstrate view camera movements (E6.3.2, E6.3.3).
3. Demonstrate how to use focusing cloth and loupe; explain the functions of each (E6.3.4).
4. Display examples of distorted perspective and examples of perspectives created by various standard movements; discuss and demonstrate ways to deal with vignetting and other distortions (E6.3.5).
5. Assign reading in text (E6.3.1-E6.3.6).
6. Supervise student practice in adjusting control knobs and using focusing cloth and loupe (E6.3.6).

SELECTED TOOLS AND MATERIALS

4" x 5" view camera with lens, black cloth, and tripod
Magnification loupe
Teacher-prepared diagram of view camera parts
Sample photographs illustrating view camera movements and the different perspectives they create

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: The Weston Eye: Composition, Detail, and the Large Format Image. Media Loft, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapter 10. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 11. Charles Swedlund.

DUTY AREA

6. OPERATING AND MAINTAINING
VIEW CAMERA

TASK / COMPETENCY

6.4 Use ground glass to adjust
focus

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

6.4

PERFORMANCE OBJECTIVE

P6.4 Given a 4" x 5" view camera with lens, black cloth, focusing tape, tripod, and subject, adjust camera and lens to focus the image sharply on the ground glass. Performance must be 100 percent correct according to manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E6.4.1 Identify and define the following 4" x 5" camera parts: lens, lens board, ground glass, focusing screens, aperture setting, shutter setting, camera front standard, camera back standard, cable release, front standard adjustment knob, back standard adjustment knob, lens board adjustment, front focus knob, bellows, back focus knob, and rough and fine focus.

E6.4.2 Outline procedure for setting up a 4" x 5" view camera and adjusting controls to focus on ground glass.

CRITERION-REFERENCED MEASURE

C6.4 Adjust camera and lens to focus subject sharply on ground glass. Performance must be 100 percent correct according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with a vocabulary list of view camera terms (E6.4.1).
2. Demonstrate how to set up 4" x 5" view camera and adjust controls to focus on ground glass; have students practice procedure (E6.4.2).
3. Assign reading in text (E6.4.1, E6.4.2).

SELECTED TOOLS AND MATERIALS

4" x 5" view camera with lens, black cloth, and tripod
Magnification loupe
Focusing tape
Teacher-prepared diagram of view camera parts

SELECTED AUDIOVISUAL MATERIALS

Slide Tape: The Weston Eye: Composition, Detail, and the Large Format Image. Media Loft, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapter 10. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 11. Charles Swedlund.

Application

DUTY AREA

6. OPERATING AND MAINTAINING
VIEW CAMERA

TASK/COMPETENCY

6.5 Maintain view camera

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

6.5

PERFORMANCE OBJECTIVE

P6.5 Given a 4" x 5" view camera, lens, focusing cloth, tripod, cable release, film, film holder, mangification loupe, and the necessary cleaning and maintenance supplies and equipment, clean, maintain, and store the camera and accessories according to manufacturer's specifications and instructor's written maintenance checklist. All items on checklist must be rated acceptable.

SELECTED ENABLING OBJECTIVES

E6.5.1 Identify by name and describe the functions of the following cleaning and maintenance supplies or equipment: camel hair brush, compressed air, lens cleaner, lens tissue, protective lens filter, static-free cloth, and front and rear lens caps.

E6.5.2 Demonstrate how to assemble and disassemble a 4" x 5" view camera.

E6.5.3 Interpret camera instruction manual to determine cleaning and maintenance procedures; list parts to be cleaned frequently, and identify necessary safety and care precautions.

E6.5.4 Demonstrate how to store view camera, film, and view camera accessories.

E6.5.5 Explain designated maintenance procedures.

CRITERION-REFERENCED MEASURE

C6.5 Clean, maintain, and store a view camera and accessories according to instructor's written maintenance checklist and manufacturer's specifications. All items on checklist must be rated acceptable.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Display and identify camera cleaning and maintenance supplies and equipment; explain functions and demonstrate use (E6.5.1).
2. Demonstrate how to assemble and disassemble a 4" x 5" view camera· supervise student practice (E6.5.2).
3. Demonstrate cleaning, maintenance, and storage procedures for view camera and accessories; emphasize routine safety, handling, and care procedures (E6.5.3).
4. Demonstrate how to store camera, film, and accessories (E6.5.4).
5. Establish maintenance schedules; supervise student practice of maintenance procedures (E6.5.5).
6. Assign reading in text (E6.5.1-E6.5.5).

SELECTED TOOLS AND MATERIALS

4" x 5" view camera with lens, black cloth, and tripod
Lens cleaner
Lens tissue
Compressed air
Lintless cloth
View camera case
Teacher-prepared maintenance checklist
Teacher-prepared diagram of view camera parts

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: The Weston Eye: Composition, Detail, and the Large Format Image.
Media Loft, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapter 10. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 11. Charles Swedlund.

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASKS/COMPETENCIES

7.1 Select and prepare chemicals for black and white film processing
7.2 Process black and white roll film
7.3 Process black and white sheet film
7.4 Push/pull process black and white film
7.5 Detect, read, and correct negative errors
7.6 Select paper and make contact print
7.7 Select paper and make enlargement on fiber-based paper
7.8 Select paper and make enlargement on resin-coated paper
7.9 Make print, using graded and variable contrast papers
7.10 Detect, read, and correct print errors
7.11 Process and print, using local controls
7.12 Make an archival print for exhibition
7.13 Dry mount a print for presentation
7.14 Mat a print for archival presentation
7.15 Make a print suitable for publication
7.16 Retouch a finished print
7.17 Tone a print for visual effect or permanence
7.18 Select and prepare chemicals for color processing
7.19 Process E-6 color reversal film (slides)
7.20 Process color negative film
7.21 Push/pull process color film
7.22 Process prints from color slides
7.23 Process color prints from color negatives
7.24 Maintain photo lab

DUTY AREA

7. PROCESSING AND FINISHING
FILM AND PRINTS

TASK/COMPETENCY

7.1 Select and prepare chemicals
for black and white film processing

— Application —

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.1

PERFORMANCE OBJECTIVE

P7.1 Given a selection of chemicals, the necessary supplies, equipment, and directions, select and prepare the appropriate developer, stop bath, fixer, hypo-clearing agent, and wetting agent solutions to the correct quantity, dilution, and temperature for processing a roll of ASA 400 black and white film. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED ENABLING OBJECTIVES

E7.1.1 Define key terms and concepts related to film processing chemicals.

E7.1.2 List chemicals used in black and white film processing.

E7.1.3 Identify type and ASA of given film.

E7.1.4 Read and interpret manufacturer's specifications regarding film processing on film package and insert.

E7.1.5 Identify and demonstrate how to use tools and equipment required to mix film processing chemicals.

E7.1.6 List safety precautions required when mixing film processing chemicals.

E7.1.7 Read and interpret time-temperature film development chart.

E7.1.8 List steps in mixing designated developer, stop bath, fixer, hypo-clearing agent, and wetting agent solutions according to manufacturer's specifications.

CRITERION-REFERENCED MEASURE

C7.1 Select and prepare the appropriate developer, stop bath, fixer, hypo-clearing agent, and wetting agent solutions to the correct quantity, dilution, and temperature for processing a roll of ASA 400 black and white film. Performance must be 100 percent correct according to manufacturer's specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students identify and discuss key terms and concepts related to processing chemicals; provide students with a list of black and white processing chemicals (E7.1.1, E7.1.2).
2. Demonstrate how to identify types of film and paper (E7.1.3).
3. Demonstrate how to read and interpret manufacturer's specifications on product package and insert to determine film processing procedures (E7.1.4).
4. Display and demonstrate use of processing tools and equipment, including graduates, funnels, thermometers, temperature control unit, stirrers, gloves, and goggles (E7.1.5).
5. Discuss safety precautions required when mixing photo chemicals (E7.1.6).
6. Display and demonstrate how to interpret time-temperature chart; have students practice using chart (E7.1.7).
7. Display film processing chemicals, and demonstrate how to select and mix appropriate chemicals according to manufacturer's specifications; demonstrate how to test for fixer exhaustion (E7.1.8).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, E11-14)
Film and chemical manufacturer's specifications
Time-temperature chart

SELECTED AUDIOVISUAL MATERIALS

Filmstrip/Cassette:	Developing Black & White Film. Greystone Films, Inc.
AV Program:	Developing Black & White Roll Film. Instructional Media Associates, Inc.
Sound/Slide:	How to Print and Enlarge. The Center for Humanities, Inc.
Filmstrip/Cassette:	Printing Black & White. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 8. Joel A. Benedict.
Photography, 2nd ed., Chapter 6. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 6. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.2 Process black and white roll film

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.2

PERFORMANCE OBJECTIVE

P7.2 Given a roll of ASA 400 black and white film, a working darkroom/photo lab, and appropriate chemicals and tools, process the film with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E7.2.1 Identify appropriate film processing tools.

E7.2.2 Outline and explain film processing procedures.

E7.2.3 Read and interpret manufacturer's specifications for film processing.

E7.2.4 Read and interpret time-temperature film development chart.

E7.2.5 Demonstrate procedure for loading film into developing tank.

E7.2.6 Demonstrate safety, lab maintenance, and clean-up procedures related to film processing.

E7.2.7 List steps in processing black and white film according to manufacturer's specifications.

CRITERION-REFERENCED MEASURE

C7.2 Process a roll of ASA 400 black and white film with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students identify and discuss key terms and concepts related to film processing; display tools and equipment required; provide students with a list of necessary tools and equipment (E7.2.1).

2. Explain black and white film processing procedures; provide students with a data sheet listing and outlining procedures (E7.2.2).

3. Demonstrate how to interpret film and chemical manufacturer's film processing specifications (E7.2.3).

4. Demonstrate how to interpret time-temperature film development chart; have students practice using chart (E7.2.4).

5. Demonstrate and have students practice loading film into developing tank (E7.2.5).

6. Demonstrate complete film processing procedure, including safety precautions, lab maintenance, and clean-up procedures (E7.2.6, E7.2.7).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Time-temperature chart
Film and chemical manufacturer's specifications

SELECTED AUDIOVISUAL MATERIALS

AV Program: Developing Black and White Roll Film. Instructional Media Associates, Inc.
Sound/Slide: Effective Darkroom Technique. The Center for Humanities, Inc.
Sound/Slide: How to Develop Film. The Center for Humanities, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 7. Joel A. Benedict.
Photography, 2nd ed., Chapter 6. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 6. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK / COMPETENCY

7.3 Process black and white sheet film

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

7.3

PERFORMANCE OBJECTIVE

P7.3 Given exposed 4" x 5" black and white sheet film, tools, working darkroom/ photo lab, and chemicals, process the film with 100 percent accuracy according to the manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E7.3.1 Identify and define the following terms: emulsion, base, notch, film holder, dark slide, film hanger, hard rubber tank, thermometer, and agitate.

E7.3.2 Identify steps in loading and unloading film hangers.

E7.3.3 Interpret film manufacturer's instructions to determine chemical selection, dilution, time, and temperature specifications.

E7.3.4 Interpret and follow chemical manufacturer's recommendations on safety precautions.

CRITERION-REFERENCED MEASURE

C7.3 Process 4" x 5" black and white sheet film with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on common 4" x 5" film and film-developing terms (E7.3.1).
2. Demonstrate how to load and unload film hangers; supervise student practice (E7.3.2).
3. Demonstrate and have students practice reading and interpreting film processing specifications (E7.3.3).
4. Assign reading in text (E7.3.1-E7.3.4).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
4" x 5" sheet film (exposed) in film holders
4" x 5" hard rubber tanks
Teacher-prepared chart/handouts on loading and unloading film hangers
Teacher-prepared chart on proper procedures for film development

SELECTED AUDIOVISUAL MATERIALS

Filmstrip/Cassette: Developing Black and White Film. Greystone Films, Inc.
Sound/Slide: How to Develop Film. The Center for Humanities, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapter 10. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 11. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.4 Push/pull process black and white film

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.4

PERFORMANCE OBJECTIVE

P7.4 Given a roll of black and white film, chemicals, and a working darkroom/photo lab, push or pull process the film with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E7.4.1 Identify and define the following terms: pull process, push process, overexpose, underexpose, density, normal density, ASA rating, grain, shadow detail, and compensating developer.

E7.4.2 Interpret film manufacturer's specifications to determine increase or decrease in development time and temperature for adjustment in exposure.

E7.4.3 Identify types of developers used for both push and pull processing.

CRITERION-REFERENCED MEASURE

C7.4 Push or pull process a roll of black and white film with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on terms related to adjusted film development (E7.4.1).
2. Demonstrate how to read and interpret film specifications on development control (E7.4.2).
3. Assign reading in text (E7.4.1-E7.4.3).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared reference chart/handouts on percentages of increase and decrease in development times and temperatures necessary to compensate for changes in exposure

SELECTED AUDIOVISUAL MATERIALS

Filmstrip/Cassette:	Developing Black and White Film. Greystone Films, Inc.
AV Program:	Developing Black and White Roll Film. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 8. Joel A. Benedict.
Photography, 2nd ed., Chapter 6. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 6. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

TASK / COMPETENCY

7.5 Detect, read, and correct negative errors

COURSE

Commercial Photography I (8607)

7.5

PERFORMANCE OBJECTIVE

P7.5 Given selected correctly and incorrectly exposed and processed black and white negatives, identify the errors in exposure and/or processing with 80 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.5.1 Identify and define the following terms related to exposure and film processing errors: overexposure, underexposure, normal exposure, overdevelopment, underdevelopment, normal development, dense, thin, contrasty, flat, edge numbers, reduction, intensification, emulsion, base, shadow areas, highlight areas, and midtones.

E7.5.2 Demonstrate how to recognize a correctly exposed negative.

E7.5.3 Demonstrate how to recognize a correctly processed negative.

E7.5.4 Demonstrate how to recognize gross exposure and processing errors.

E7.5.5 Demonstrate proper exposure technique, using a 35mm single lens reflex camera with meter.

E7.5.6 Outline procedure for proper black and white film processing.

E7.5.7 Demonstrate methods for correcting negative errors.

CRITERION-REFERENCED MEASURE

C7.5 Identify the errors in exposure and/or processing for selected negatives with 80 percent accuracy according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to evaluating negatives (E7.5.1).
2. Discuss guidelines for recognizing correctly exposed and processed negatives; have students practice analyzing negatives to identify possible exposure or processing errors (E7.5.2-E7.5.4).
3. Discuss and demonstrate methods for correcting errors (E7.5.7).
4. Give students a practical exam on matching negatives with the appropriate term that describes their exposure and processing (E7.5.1).
5. Review and discuss correct exposure and film processing techniques; have students discuss possible causes of exposure or processing errors (E7.5.5, E7.5.6).
6. Have students evaluate their own negatives (E7.5.1-E7.5.7).

SELECTED TOOLS AND MATERIALS

Teacher-prepared chart on negative defects
Teacher-prepared specifications for correctly exposed and developed negatives

SELECTED AUDIOVISUAL MATERIALS

AV Program: Darkroom Tools and Techniques. Instructional Media Associates, Inc.
Filmstrip/Cassette: Developing Black & White Film. Greystone Films, Inc.
AV Program: Developing Black & White Roll Film. Instructional Media Associates, Inc.
Sound/Slide: Effective Darkroom Technique. The Center for Humanities, Inc.
Sound/Slide: How to Develop Film. The Center for Humanities, Inc.
Selection of correctly and incorrectly developed negatives in slide mounts for projection

SELECTED REFERENCES

Photography, 2nd ed., Chapter 6, pp. 160-175. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 6, pp. 132-143. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.6 Select paper and make contact print

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.6

PERFORMANCE OBJECTIVE

P7.6 Given a roll of black and white negatives, a selection of photographic papers, and a working photo lab, select paper and make a contact print with 100 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.6.1 Identify and define the following terms: contact frame, contact printer, enlarger, enlarging lens, f-stop, develop, stop bath, fix, permawash, photographic paper, safelight, and tongs.

E7.6.2 Identify types of photographic papers and their appropriate uses.

E7.6.3 Outline procedure for making a contact print.

E7.6.4 Demonstrate how to use contact frame or printer.

E7.6.5 Select and prepare appropriate chemicals for processing black and white prints.

CRITERION-REFERENCED MEASURE

C7.6 Select black and white paper and make contact print with 100 percent accuracy according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on common terms relating to printing of a contact sheet (E7.6.1).
2. Assign reading in text (E7.6.1-E7.6.5).
3. Display types of photographic paper, and discuss guidelines for selecting appropriate paper for contact prints (E7.6.2).
4. Demonstrate how to make a contact print; have students practice selecting paper, using contact frame or printer, and making contact prints (E7.6.2-E7.6.5).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared chart on steps in the photographic printing process
Teacher-prepared specifications on selecting papers and making contact prints

SELECTED AUDIOVISUAL MATERIALS

AV Program:	The Contact Sheet. Instructional Media Associates, Inc.
Sound/Slide:	How to Print and Enlarge. The Center for Humanities, Inc.
Filmstrip/Cassette:	Printing Black and White. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 9. Joel A. Benedict.
Photography, 2nd ed., Chapter 7. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 7 and 8. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

7.7 Select paper and make enlargement on fiber-based paper

COURSE

Commercial Photography I (8607)

7.7

PERFORMANCE OBJECTIVE

P7.7 Given a black and white negative, fiber-based photographic papers, and a working photo lab, select the correct paper and make an enlargement of the negative on fiber-based paper with 100 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.7.1 Identify and define the following terms on enlargements and fiber-based papers: paper base, emulsion, rag content, enlarger, lens, f-stop, trimmer, black and white chemicals, safelight, permanence, and contrast grades.

E7.7.2 Identify necessary equipment and supplies.

E7.7.3 List guidelines for selection of fiber-based photographic papers for enlargements.

E7.7.4 Outline procedures and list correct processing times for enlargements on different types of fiber-based paper.

E7.7.5 List steps in making an enlargement of a negative on appropriate fiber-based paper.

E7.7.6 Critique quality of enlargements made on fiber-based paper.

E7.7.7 Select and prepare appropriate chemicals for processing black and white prints.

CRITERION-REFERENCED MEASURE

C7.7 Select correct paper and make an enlargement of a black and white negative on fiber-based paper with 100 percent accuracy according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to fiber-based photographic papers (E7.7.1).
2. Have students analyze sample photographs printed on fiber-based paper (E7.7.6).
3. Display fiber-based papers, and identify supplies and equipment needed to make enlargements from black and white negatives (E7.7.2).
4. Demonstrate how to make an enlargement from a black and white negative, using fiber-based paper; explain how to interpret time-temperature chart for fiber-based papers (E7.7.3-E7.7.5).
5. Assign reading in text (E7.7.1-E7.7.7).
6. Have students complete exercise on making enlargements of black and white negatives on fiber-based paper; have students critique quality of one another's work (E7.7.5, E7.7.6).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Time-temperature chart for fiber-based paper
Teacher-prepared specifications on printing with fiber-based papers

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Enlarging. Instructional Media Associates, Inc.
Sound/Slide:	How to Print and Enlarge. The Center for Humanities, Inc.
Filmstrip/Cassette:	Printing Black and White. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 10 and 11. Joel A. Benedict.
Photography, 2nd ed., Chapter 7. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 7 and 8. Charles Swedlund.

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.8 Select paper and make enlargement on resin-coated paper

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.8

PERFORMANCE OBJECTIVE

P7.8 Given a black and white negative, resin-coated photographic papers, and a working photo lab, select the correct paper and make an enlargement of the negative on resin-coated paper with 100 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.8.1 Identify and define the following terms on enlargements and resin-coated paper: resin-coated, plastic, paper base, emulsion, enlarger, lens, f-stop, timer, black and white chemicals, safelight, and permanence.

E7.8.2 List guidelines for selection of resin-coated papers for enlargements.

E7.8.3 Identify necessary equipment and supplies.

E7.8.4 Outline procedures and list correct processing times for enlargements on fiber-based paper.

E7.8.5 Select and prepare appropriate chemicals for processing black and white prints.

E7.8.6 List steps in making an enlargement from a black and white negative on resin-coated paper.

E7.8.7 Critique quality of enlargements made on resin-coated paper.

CRITERION-REFERENCED MEASURE

C7.8 Select correct paper and make an enlargement of a black and white negative on resin-coated paper with 100 percent accuracy according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define or explain key concepts and terms related to resin-coated photographic papers (E7.8.1).
2. Have students analyze sample photographs printed on resin-coated paper (E7.8.7).
3. Identify supplies and equipment needed to make enlargements, and give demonstrations on use of equipment as required (E7.8.3).
4. Demonstrate how to select resin-coated paper for enlargements, explain how to use time-temperature chart, and demonstrate enlargement procedures (E7.8.2, E7.8.4, E7.8.6).
5. Have students practice making enlargements from black and white negatives, using resin-coated paper; have them critique quality of one another's work (E7.8.5-E7.8.7).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Time-temperature chart for resin-coated paper
Teacher-prepared specifications on printing with resin-coated papers

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Enlarging. Instructional Media Associates, Inc.
Sound/Slide:	How to Print and Enlarge. The Center for Humanities, Inc.
Filmstrip/Cassette:	Printing Black and White. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 10 and 11. Joel A. Benedict.
Photography, 2nd ed., Chapter 7. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 7 and 8. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK / COMPETENCY

7.9 Make print, using graded and variable contrast papers

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.9

PERFORMANCE OBJECTIVE

P7.9 Given a black and white negative, graded and variable contrast papers, and a working photo lab, make prints of the negative, using both types of paper with 100 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.9.1 Identify and define the following terms on printing with graded and variable contrast papers: emulsion, base, film holder, contrast grades, variable contrast paper, variable contrast filters, and filters.

E7.9.2 Identify procedures for selection and use of graded and variable contrast papers.

E7.9.3 List necessary equipment and supplies.

E7.9.4 Outline and demonstrate procedure for making prints of black and white negatives, using graded paper.

E7.9.5 Outline advantages and disadvantages of graded and variable contrast papers.

E7.9.6 List steps in selecting and preparing appropriate chemicals for processing black and white prints.

E7.9.7 Identify procedure for making an enlargement on variable contrast paper with and without variable contrast filters.

E7.9.8 Critique quality of prints made from black and white negatives, using graded and variable contrast papers

CRITERION-REFERENCED MEASURE

C7.9 Make prints of a black and white negative, using graded and variable contrast papers with 100 percent accuracy according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to graded and variable contrast papers (E7.9.1).
2. Discuss and demonstrate selection and uses of graded and variable contrast papers (E7.9.2).
3. Have students analyze sample photographs on graded and variable contrast papers (E7.9.2, E7.9.8).
4. Identify equipment and supplies needed for printing with graded and variable contrast papers, and give demonstration on use of equipment (E7.9.3).
5. Demonstrate procedures for making prints, using graded and variable contrast papers; explain how to select paper and how to interpret time-temperature chart (E7.9.4, E7.9.7).
6. Assign exercises in making prints from black and white negatives, using graded and variable contrast papers; have students critique one another's work (E7.9.4, E7.9.6-E7.9.8).
7. Have students discuss advantages and disadvantages of graded and variable contrast papers (E7.9.5).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Time-temperature chart for variable contrast papers
Teacher-prepared specifications on printing with graded and variable contrast papers

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Enlarging. Instructional Media Associates, Inc.
Sound/Slide:	How to Print and Enlarge. The Center for Humanities, Inc.
Filmstrip/Cassette:	Printing Black and White. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 10, 11, and 14. Joel A. Benedict.
Photography, 2nd ed., Chpater 7. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 7 and 8. Charles Swedlund.

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.10 Detect, read, and correct print errors

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.10

PERFORMANCE OBJECTIVE

P7.10 Given a selection of correctly and incorrectly exposed and processed black and white prints, identify the errors in exposure and/or processing with 80 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.10.1 Identify and define the following terms related to exposure and film processing errors: overexposure, underexposure, normal exposure, overdevelopment, underdevelopment, normal development, thin, contrasty, flat, edge numbers, emulsion, base, shadow areas, highlight areas, midtones, staining, contamination, bleaching, hypo eliminator, and fading.

E7.10.2 Identify types and causes of print exposure and processing errors.

E7.10.3 Demonstrate how to recognize a correctly exposed and processed print.

E7.10.4 Demonstrate proper print exposure and processing techniques.

E7.10.5 Demonstrate methods for correcting print errors.

E7.10.6 Analyze black and white prints and detect errors in a practice situation.

CRITERION-REFERENCED MEASURE

C7.10 Identify the exposure and processing errors in a selection of black and white prints with 80 percent accuracy according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to print evaluation and error detection; identify and illustrate common print defects and discuss their causes (E7.10.1, E7.10.2).

2. Review procedures for producing correctly exposed and processed prints (E7.10.3, E7.10.4).

3. Display an assortment of correctly and incorrectly exposed prints; have students analyze prints, detect defects, and state causes of processing or exposure errors (E7.10.2, E7.10.3, E7.10.6).

4. Demonstrate and discuss methods for correcting and avoiding errors (E7.10.4, E7.10.5).

5. Give students a practical exam on matching prints with the appropriate term that describes their exposure and processing (E7.10.1-E7.10.6).

6. Have students evaluate their own prints (E7.10.6).

SELECTED TOOLS AND MATERIALS

Examples of correctly and incorrectly exposed prints
Teacher-prepared specifications for correctly exposed and processed prints

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Darkroom Tools and Techniques. Instructional Media Associates, Inc.
Sound/Slide:	Effective Darkroom Technique. The Center for Humanities, Inc.
AV Program:	Enlarging. Instructional Media Associates, Inc.
Sound/Slide:	How to Print and Enlarge. The Center for Humanities, Inc.
Filmstrip/Cassette:	Printing Black and White. Greystone Films, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 10, 11, and 14. Joel A. Benedict.
Photography, 2nd ed., Chapter 7, pp. 164-173. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 7 and 8, pp. 189-191 and 208-234. Charles Swedlund.

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.11 Process and print, using local controls

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.11

PERFORMANCE OBJECTIVE

P7.11 Given a negative with various tonal imperfections or qualities and the necessary equipment and supplies, process and print the negative, using local controls such as dodging and burning-in with 90 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.11.1 Identify and define the following terms related to local printing controls: dodging, burning-in, dodging tool, "bringing-out-detail," overexposed, underexposed, and manipulation.

E7.11.2 Identify types and causes of print exposure errors.

E7.11.3 List steps necessary to achieve proper print exposure and tonal balance.

CRITERION-REFERENCED MEASURE

C7.11 Process and print a given negative, using local controls as dodging and burning-in with 90 percent accuracy according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to local printing controls (E7.11.1).
2. Demonstrate dodging and burning-in techniques (E7.11.1, E7.11.3).
3. Display photographs that illustrate uses and degrees of local controls (E7.11.1-E7.11.3).

SELECTED TOOLS AND MATERIALS

Examples of normally exposed and manipulated prints
Teacher-prepared chart on print defects needing local printing controls
Teacher-prepared specifications on local printing controls

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Darkroom Tools and Techniques. Instructional Media Associates, Inc.
Sound/Slide:	Effective Darkroom Technique. The Center for Humanities, Inc.
AV Program:	Finishing and Mounting Prints. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 18 and 19. Joel A. Benedict.
Photography, 2nd ed., Chapter 7. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 8. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.12 Make an archival print for exhibition

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

7.12

PERFORMANCE OBJECTIVE

P7.12 Given a black and white negative, a working darkroom/photo lab, fiber-based paper, and the necessary supplies, make an archival print for exhibition. The print must be processed for optimum permanence, and performance must be 100 percent correct according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.12.1 Identify and define the following terms related to archival printing: porous, permanence, rag content, processing times, toning, permawash (or hypo-clearing agent), linen tape, acid-free, and museum board.

E7.12.2 List proper order, dilution, and processing times for black and white chemicals.

E7.12.3 Outline and demonstrate procedure for making archival prints.

E7.12.4 List steps in selecting and preparing appropriate chemicals for processing archival quality black and white prints.

CRITERION-REFERENCED MEASURE

C7.12 Make an archival print for exhibition. The print must be processed for optimum permanence, and performance must be 100 percent correct according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to making an archival print for exhibition (E7.12.1).
2. Have students analyze examples of archival prints (E7.12.1).
3. Demonstrate how to make an archival print for exhibition (E7.12.3).
4. Assign reading in text (E7.12.1-E7.12.4).
5. Assign exercises in making archival prints, and have students critique results (E7.12.3, E7.12.4).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Samples of archival prints
Teacher-prepared specifications for archival quality prints

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Darkroom Tools and Techniques. Instructional Media Associates, Inc.
Sound/Slide:	Effective Darkroom Technique. The Center for Humanities, Inc.
AV Program:	Finishing and Mounting Prints. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 22. Joel A. Benedict.
Photography, 2nd ed., Chapter 7. Barbara Upton and John Upton.
Photography, 2nd ed., Chpater 8. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.13 Dry mount a print for presentation

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.13

PERFORMANCE OBJECTIVE

P7.13 Given one black and white print and one color print, a mounting press, ruler, mount board, and dry-mount tissue, dry mount each print for presentation with 100 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.13.1 Identify and define the following terms: dry-mount tissue, cover sheet, tacking iron, dry-mount press, mount board, white lintless gloves, T-square, and paper trimmer.

E7.13.2 Demonstrate how to position print correctly on mount board and attach tissue to print.

E7.13.3 Interpret manufacturer's specifications on temperature adjustment of mounting press.

E7.13.4 Demonstrate how to use mounting press.

CRITERION-REFERENCED MEASURE

C7.13 Dry mount one black and white print and one color print on mount boards for presentation with 100 percent accuracy according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on common dry-mounting terms; discuss terms (E7.13.1).

2. Demonstrate how to measure, position, and dry mount a print (E7.13.1-E7.13.4).

3. Demonstrate how to read and interpret manufacturer's specifications on temperature adjustment of mounting press (E7.13.3).

4. Assign reading in text (E7.13.1-E7.13.4).

5. Supervise student practice in dry-mounting prints for presentation; have them critique one another's work (E7.13.2-E7.13.4).

SELECTED TOOLS AND MATERIALS

Print presentation and framing equipment (See Appendix D, #14)
Teacher-prepared chart on how to position a print properly on mount board
Teacher-prepared specifications on dry-mounting procedures

SELECTED AUDIOVISUAL MATERIALS

AV Program: Finishing and Mounting Prints. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 12. Joel A. Benedict.
Photography, 2nd ed., pp. 182-184. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 235-239. Charles Swedlund.

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.14 Mat a print for archival presentation

— Application —

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

7.14

PERFORMANCE OBJECTIVE

P7.14 Given a photograph, T-square, ruler, mat cutter, pencil eraser, linen tape, and mount board, mat a print for archival presentation with 100 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.14.1 Identify and define the following terms: archival, mat cutter, linen tape, overmat, 100% rag board, buffered, hinges, gum eraser, distilled water, and sponge.

E7.14.2 Demonstrate how to measure window for center cut of mat board.

E7.14.3 Practice using mat cutter.

E7.14.4 Demonstrate how to attach linen tape to print and board.

CRITERION-REFERENCED MEASURE

C7.14 Mat a print for archival presentation with 100 percent accuracy according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on common matting terms; discuss terms (E7.14.1).
2. Demonstrate procedure for over-matting (E7.14.2-E7.14.4).
3. Assign reading in text (E7.14.1-E7.14.4).
4. Supervise student practice in making over-mats; have them critique one another's work (E7.14.2-E7.14.4).

SELECTED TOOLS AND MATERIALS

Print presentation and framing equipment (See Appendix D, #14)

SELECTED AUDIOVISUAL MATERIALS

AV Program: Finishing and Mounting Prints. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 12. Joel A. Benedict.
Photography, 2nd ed., pp. 185-187. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 240-242. Charles Swedlund.

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.15 Make a print suitable for publication

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.15

PERFORMANCE OBJECTIVE

P7.15 Given a black and white negative, glossy fiber-based or resin-coated paper, and a working photo lab, make a print suitable for publication with 90 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.15.1 Define the following terms related to prints suitable for publication: glossy, resin-coated (RC), fiber-based, flat, and contrasty.

E7.15.2 Identify techniques used by the media for print reproduction.

E7.15.3 Compare results of published prints in magazines and in newspapers.

E7.15.4 Make prints of black and white negatives on glossy resin-costed or fiber-based paper.

E7.15.5 Determine suitability of prints for publication.

CRITERION-REFERENCED MEASURE

C7.15 Make a black and white print suitable for publication. Performance must be 90 percent correct according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to publication quality photographs (E7.15.1).

2. Discuss techniques used by the media for print reproduction; display different types of prints suitable for publication; have students analyze prints and compare results of prints reproduced in newspapers and magazines (E7.15.2, E7.15.3).

3. Demonstrate how to select paper and make a print suitable for publication (E7.15.4).

4. Assign students exercises in making prints on glossy resin-coated or fiber-based paper; have them critique one another's work (E7.15.4, E7.15.5).

5. Assign students a research project on print reproduction practices of the media (E7.15.2).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Examples of published prints in newspapers, magazines, brochures, or other publications
Teacher-prepared specifications on printing for publication

SELECTED AUDIOVISUAL MATERIALS

AV Program: Darkroom Tools and Techniques. Instructional Media Associates, Inc.
AV Program: Enlarging. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 10 and 11. Joel A. Benedict.
Photography, 2nd ed. Barbara Upton and John Upton.
Photography, 2nd ed. Charles Swedlund.

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.16 Retouch a finished print

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.16

PERFORMANCE OBJECTIVE

P7.16 Given a print made from a scratched and/or dusty negative, retouch the print to restore normal appearance with 90 percent accuracy according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.16.1 Identify the define the following terms related to retouching photographs: spot-tone, retouching dyes, spot-off, etching, potassium-ferrocyanide, spotting brush, brush thickness (00, 000, or 0), and bleaching.

E7.16.2 Demonstrate and practice correct spotting and retouching techniques.

CRITERION-REFERENCED MEASURE

C7.16 Retouch a finished print to restore normal appearance with 90 percent accuracy according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to spotting and retouching photos (E7.16.1).
2. Display supplies and equipment needed for spotting or retouching prints and demonstrate techniques (E7.16.1).
3. Analyze a variety of photographic examples in need of spotting or retouching; identify appropriate techniques for making corrections (E7.16.2).
4. Supervise student practice in spotting or retouching photographs (E7.16.2).

SELECTED TOOLS AND MATERIALS

Practice color and black and white workprints
Print presentation and framing equipment (See Appendix D, #14)
Teacher-prepared specifications on print retouching

SELECTED AUDIOVISUAL MATERIALS

AV Program: Darkroom Tools and Techniques. Instructional Media Associates, Inc.
AV Program: Finishing and Mounting Prints. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, p. 46. Joel A. Benedict.
Photography, 2nd ed., p. 180. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 233-234. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.17 Tone a print for visual effect or permanence

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

7.17

PERFORMANCE OBJECTIVE

P7.17 Given a black and white print, a working darkroom/photo lab, and job specifications, tone the print for permanence or a desired visual effect. All safety precautions must be followed, and performance must be 100 percent correct according to instructor's written specifications.

SELECTED ENABLING OBJECTIVES

E7.17.1 Identify and define the following terms: toxic, toner, sepia toner, selenium toner, gold toner, copper toner, archival, and permanence.

E7.17.2 Interpret paper manufacturer's specifications on cautious use of toners.

E7.17.3 Follow toner manufacturer's recommendations on safety gear and practices.

E7.17.4 Outline and demonstrate procedures for toning designated black and white prints.

CRITERION-REFERENCED MEASURE

C7.17 Tone a black and white print for visual effect or permanence. All safety precautions must be followed, and performance must be 100 percent correct according to instructor's written specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on common terms related to toning; discuss terms (E7.17.1).
2. Have students interpret chemical and paper manufacturer's specifications on toning (E7.17.2-E7.17.4).
3. Demonstrate a complete toning process (E7.17.4).
4. Assign reading in text (E7.17.1-E7.17.4).
5. Have students execute safety precautions (E7.17.2, E7.17.3).
6. Supervise student practice in toning prints; have them critique one another's work (E7.17.4).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared specifications on the consecutive steps in toning prints
Teacher-prepared chart on safety factors to consider when toning prints

SELECTED AUDIOVISUAL MATERIALS

Sound/Slide: Effective Darkroom Technique. The Center for Humanities, Inc.
AV Program: Finishing and Mounting Prints. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 22. Joel A. Benedict.
Photography, 2nd ed., Chapter 8. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 8. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.18 Select and prepare appropriate chemicals for color processing

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

7.18

PERFORMANCE OBJECTIVE

P7.18 Given a selection of chemicals and the necessary supplies, equipment, and directions, select and prepare the appropriate developing, fixing, and stabilizing solutions for processing color slides and negatives to correct quantity, dilution, and temperature with 95 percent accuracy according to manufacturer's specifications.

SELECTED ENABLING OBJECTIVES

E7.18.1 Define key terms and concepts related to color film processing chemicals.

E7.18.2 List chemicals used in color film processing.

E7.18.3 Identify distinction between color negative and color slide film.

E7.18.4 Interpret manufacturer's specifications regarding processing of a given film.

E7.18.5 Identify and demonstrate use of tools and equipment required to mix film processing chemicals.

E7.18.6 List safety precautions required when mixing chemicals.

E7.18.7 Interpret time-temperature chart.

E7.18.8 List steps in mixing designated color chemicals according to manufacturer's specifications.

CRITERION-REFERENCED MEASURE

C7.18 Select and prepare the appropriate developer, fixer, and stabilizer for processing color negatives and slides to the correct quantity, dilution, and temperature with 95 percent accuracy according to manufacturer's specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students identify and discuss key terms and concepts related to color film processing chemicals; provide students with a list of types of color film processing chemicals (E7.18.1, E7.18.2).
2. Explain how to make the distinction between color slides and negatives (E7.18.3).
3. Demonstrate how to read and interpret manufacturer's specifications on processing a given film (E7.18.4).
4. Display and demonstrate use of color film processing tools and equipment (E7.18.5).
5. Discuss safety precautions (E7.18.6).
6. Display and demonstrate how to interpret time-temperature chart (E7.18.7).
7. Display different types of color film processing chemicals, and demonstrate how to select and mix them according to manufacturer's specifications (E7.18.1-E7.18.8).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Film and chemical manufacturer's specifications
Time-temperature chart

SELECTED AUDIOVISUAL MATERIALS

AV Program: Developing Color Negatives. Instructional Media Associates, Inc.
AV Program: Developing Color Slides. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 24 and 26. Joel A. Benedict.
Photography, 2nd ed., Chapter 13. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 13. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING
FILM AND PRINTS

TASK/COMPETENCY

7.19 Process E-6 reversal film (slides)

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

7.19

PERFORMANCE OBJECTIVE

P7.19 Given a roll of 35mm exposed E-6 reversal film, the appropriate chemicals, and a working darkroom/photo lab, process the E-6 film with 95 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E7.19.1 Identify and define the following terms: film drum, film tank, thermometer, plastic 35mm reels, E-6 chemicals, temperature bath, timer, uniroller, and slide mounts.

E7.19.2 Set up E-6 chemicals in order and bring to proper temperature according to film and chemical manufacturer's specifications.

E7.19.3 List steps in processing E-6 reversal film.

CRITERION-REFERENCED MEASURE

C7.19 Process a roll of exposed E-6 reveral film with 95 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on common color transparency related terms; discuss terms (E7.19.1).
2. Demonstrate how to read and interpret film and chemical specifications (E7.19.2).
3. Demonstrate complete E-6 process (E7.19.4).
4. Assign reading in text (E7.19.1-E7.19.4).
5. Supervise student practice in processing E-6 reversal film; have students critique one another's work (E7.19.1-E7.19.4).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Time-temperature chart for E-6 processing

SELECTED AUDIOVISUAL MATERIALS

AV Program: Developing Color Slides. Instructional Media Associates, Inc.
AV Program: Printing Color Slides. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 24. Joel A. Benedict.
Photography, 2nd ed., Chapter 13. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 13. Charles Swedlund.

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.20 Process color negative film

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

7.20

PERFORMANCE OBJECTIVE

P7.20 Given a roll of exposed 35mm color negative film, the appropriate chemicals, and a working darkroom/photo lab, process a roll of color negative film with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E7.20.1 Identify and define the following terms: C-41 process, uniroller, film drum, plastic developing reels, fixer, stabilizer, and K-2 kit.

E7.20.2 Interpret film manufacturer's specifications for proper development.

E7.20.3 Interpret chemical manufacturer's specifications for the proper amount, dilution, and temperature of chemicals for a specified film.

E7.20.4 Follow the chemical manufacturer's recommendations on safety precautions.

E7.20.5 Practice rolling film onto plastic reels.

E7.20.6 Outline steps for processing color negative film.

CRITERION-REFERENCED MEASURE

C7.20 Process a roll of exposed color negative film with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on common terms relating to color negative film and development; discuss terms (E7.20.1).
2. Demonstrate complete process of developing color negatives (E7.20.6).
3. Assign reading in text (E7.20.1-E7.20.6).
4. Supervise student practice in processing color negative film; have them critique one another's work (E7.20.1-E7.20.6).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Time-temperature chart for C-41 processing

SELECTED AUDIOVISUAL MATERIALS

AV Program: Developing Color Negatives. Instructional Media Associates, Inc.
AV Program: Printing Color Negatives. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 26. Joel A. Benedict.
Photography, 2nd ed., Chapter 13. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 13. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.21 Push/pull process color film

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

7.21

PERFORMANCE OBJECTIVE

P7.21 Given a roll of 35mm exposed color slide (E-6) or color negative (C-41) film, the appropriate chemicals, and a working darkroom/photo lab, push or pull process the film to adjust for exposure with 95 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E7.21.1 Identify and define the following terms related to color film development: film drum, film tank, thermometer, plastic 35mm reels, E-6 chemicals, C-41 chemicals, temperature bath, timer, uniroller, slide mounts, overdevelop: push, and underdevelop: pull.

E7.21.2 Identify appropriate color film chemicals and proper temperature for push or pull processing according to film and chemical manufacturer's specifications.

E7.21.3 Interpret film and chemical manufacturer's time-temperature chart for adjustment in film development for push/pull processing.

CRITERION-REFERENCED MEASURE

C7.21 Pull or push process one roll of exposed color slide (E-6) or negative (C-41) film to adjust for exposure with 95 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary lists on common color film processing terms (E7.21.1).
2. Demonstrate how to read and interpret color film and chemical manufacturer's specifications for push/pull processing (E7.21.2).
3. Interpret and discuss time-temperature chart for adjustment in film development for push/pull processing (E7.21.3).
4. Demonstrate push/pull processing (E7.21.1-E7.21.3).
5. Assign reading in text (E7.21.1-E7.21.3).
6. Supervise student practice of push/pull processing of color film; have them critique results (E7.21.1-E7.21.3).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program: Developing Color Negatives. Instructional Media Associates, Inc.
AV Program: Developing Color Slides. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 24 and 26. Joel A. Benedict.
Photography, 2nd ed. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 12. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING
FILM AND PRINTS

TASK/COMPETENCY

7.22 Process prints from color slides

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

7.22

PERFORMANCE OBJECTIVE

P7.22 Given a color slide, the necessary chemicals, and a working darkroom/photo lab, make a print from the color slide with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E7.22.1 Identify and define the following terms: Ilford, paper drum, uniroller, Cibachrome drum, color-viewing print filters, color head, CC filters, emulsion, and color balance.

E7.22.2 Interpret manufacturer's specifications on Cibachrome paper.

E7.22.3 Practice loading paper into drum.

E7.22.4 Outline procedure for processing Cibachrome papers.

CRITERION-REFERENCED MEASURE

C7.22 Process a print from a color slide with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on terms related to Cibachrome printing (E7.22.1).
2. Demonstrate how to make a color print from a color slide (E7.22.4).
3. Demonstrate how to read and interpret color paper, chemical, and equipment manufacturer's specifications (E7.22.2).
4. Supervise student practice in processing Cibachrome prints; have them critique completed work (E7.22.1-E7.22.4).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program: Printing Color Slides. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 24 and 26. Joel A. Benedict.
Photography, 2nd ed. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 13. Charles Swedlund.

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.23 Process color prints from color negatives

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

7.23

PERFORMANCE OBJECTIVE

P7.23 Given a color negative, the necessary chemicals, and a working darkroom/photo lab, produce a color print from the color negative with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED ENABLING OBJECTIVES

E7.23.1 Identify and define the following terms: paper drum, uniroller, color viewing filter, color head, CC filters, emulsion, and color balance.

E7.23.2 Interpret manufacturer's specifications on color papers.

E7.23.3 Follow chemical manufacturer's recommendations on safety precautions.

E7.23.4 Practice loading paper properly into drum.

E7.23.5 Outline procedures for processing color prints from color negatives.

CRITERION-REFERENCED MEASURE

C7.23 Process a color print from a color negative with 100 percent accuracy according to manufacturer's specifications as verified by the instructor.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on terms related to printing from color negatives; discuss terms (E7.23.1).
2. Demonstrate how to process a color print from a color negative (E7.23.5).
3. Demonstrate how to read and interpret color paper, chemical, and equipment manufacturer's specifications (E7.23.2, E7.23.3).
4. Supervise student practice in processing color prints from color negatives; have them critique one another's work (E7.23.1-E7.23.5).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared chart on steps in color negative printing

SELECTED AUDIOVISUAL MATERIALS

AV Program: Color Printing from Color Negatives (#650). The Center for Humanities, Inc.
AV Program: Printing Color Negatives. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 27. Joel A. Benedict.
Photography, 2nd ed., Chpater 13. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 13. Charles Swedlund.

Application

DUTY AREA

7. PROCESSING AND FINISHING FILM AND PRINTS

TASK/COMPETENCY

7.24 Maintain photo lab

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

7.24

PERFORMANCE OBJECTIVE

P7.24 Given the necessary darkroom facility, equipment, and supplies, assist a laboratory technician in operating and maintaining the facility according to procedures established by the instructor. All items on Checklist 7.24, Appendix E must be rated acceptable.

SELECTED ENABLING OBJECTIVES

E7.24.1 List names, uses, and characteristics of standard darkroom equipment, tools, and materials.

E7.24.2 Demonstrate use of enlarger, easel, safelights, and paper safes.

E7.24.3 Mix chemicals according to manufacturer's specifications.

E7.24.4 Text reuseable chemicals according to manufacturer's specifications.

E7.24.5 Clean tools and equipment according to specifications.

E7.24.6 Store equipment and tools according to lab procedures.

E7.24.7 Identify and follow lab safety procedures.

E7.24.8 Follow laboratory maintenance schedule.

CRITERION-REFERENCED MEASURE

C7.24 Assist in operating and maintaining a photo lab according to procedures established by the instructor. All items on Checklist 7.24, Appendix E must be rated acceptable.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students identify and state uses of standard laboratory tools, equipment, and materials (E7.24.1).
2. Have students demonstrate use of selected pieces of laboratory equipment (E7.24.2).
3. Demonstrate and discuss maintenance procedures for the lab (E7.24.8).
4. Demonstrate how to mix and test selected chemicals (E7.24.3, E7.24.4).
5. Demonstrate safety procedures (E7.24.7).
6. Demonstrate cleaning and storage procedures as required (E7.24.5).
7. Set up a schedule for students to perform maintenance procedures on a regular basis (E7.24.8).

SELECTED TOOLS AND MATERIALS

Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Darkroom Tools and Techniques. Instructional Media Associates, Inc.
Sound/Slide:	Effective Darkroom Technique. The Center for Humanities, Inc.
Sound/Slide:	How to Print and Enlarge. The Center for Humanities, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 7-12 and 14-27. Joel A. Benedict.
Kodak Black and White Darkroom Dataguide, 12-1980, R-20. Kodak.
Kodak Color Darkroom Dataguide, 1-1980, R-19. Kodak.
Photography, 2nd ed., Chapter 8. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 7. Charles Swedlund.

DUTY AREA

8. DOCUMENTING PEOPLE AND EVENTS

TASKS/COMPETENCIES

8.1 Document an activity or event

8.2 Photograph an environmental portrait

8.3 Produce a spot news photograph under a deadline

8.4 Produce a documentary photo-essay

DUTY AREA

8. DOCUMENTING PEOPLE AND EVENTS

TASK/COMPETENCY

8.1 Document an activity or event

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

8.1

PERFORMANCE OBJECTIVE

P8.1 Given a 35mm single lens reflex camera and 50mm lens, a 20-exposure roll of fast black and white film, a specified activity or event, a designated location with normal indoor or outdoor lighting, and a working darkroom, shoot and process a minimum of three photographs that document the activity or event with 80 percent accuracy according to instructor's written checklist.

SELECTED ENABLING OBJECTIVES

E8.1.1 Define the following terms related to photographic documentation: document, documentary, location, setting, background, angle, shot, close-up, medium shot, long shot, establishing shot, candid, staged, metering, lighting, existing light, "fast" film, ASA, visual impact, communication, composition, design, center of interest, dead space, detail, expression, simplicity, clarity, release form, authorization, and shooting or exposure record.

E8.1.2 Operate correctly a 35mm single lens reflex camera with a 50mm (normal lens) with medium speed and fast speed films in a variety of normal lighting situations.

E8.1.3 Obtain press pass and model or client release forms.

E8.1.4 State the objective of the shooting assignment on documenting an activity or event.

E8.1.5 Cite fundamental rules of professional conduct for photographers working on location.

E8.1.6 Scout out location, obtain background information on the event, people, and facilities, gain authorization to shoot, and make other preshooting arrangements.

E8.1.7 Determine lighting conditions.

E8.1.8 Select appropriate film for activity and lighting conditions.

E8.1.9 Clarify assignment, determine types of shots required, and plan shooting schedule.

E8.1.10 Determine camera positions and angles.

E8.1.11 Check equipment and supplies.

E8.1.12 Process film, produce and edit contact sheet, and produce enlargements.

E8.1.13 Mount enlargements and include in portfolio.

E8.1.14 Critique documentary photographs.

CRITERION-REFERENCED MEASURE

C8.1 Photograph an activity in a designated location with a 35mm single lens reflex camera with a 50mm lens, and process a minimum of three photographs that successfully document the activity with 80 percent accuracy according to instructor's written checklist.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to documentary photography on location (E8.1.1).
2. Review use of equipment as needed (E8.1.2).
3. Identify and discuss on-location photography procedures; have students cite standards for professional conduct and list special requirements or considerations for this type of photography (E8.1.3-E8.1.11).
4. Have students analyze documentary photographic examples (E8.1.1, E8.1.14).
5. Assign reading in text (E8.1.1-E8.1.14).
6. Assign a practice exercise in a familiar location; have students critique their work (E8.1.2-E8.1.11).
7. Invite a guest speaker to discuss professional procedures and to present and critique examples of professional and student work (E8.1.1-E8.1.14).
8. Give actual on-location assignments to document school or community activities or events (E8.1.1-E8.1.14).
9. Have students process film, produce and edit contact sheets, and print enlargements (E8.1.12).
10. Have students label, mount, and include enlargements in portfolio (E8.1.13).
11. Have students critique one another's work (E8.1.14).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera with 50mm lens
35mm black and white film (ASA 400)
Teacher-prepared press passes and model release forms as needed
Teacher-prepared photo ID stamp or forms
Teacher-prepared exposure data recording form
Teacher-prepared checklist on documenting an activity or event

SELECTED AUDIOVISUAL MATERIALS

Film: Images of Man, I: Cornell Capa. Scholastic Magazines, Inc.
Film: Images of Man, I: Bruce Davidson. Scholastic Magazines, Inc.
Film: Images of Man, I: Don McCullin. Scholastic Magazines, Inc.
Film: Images of Man, I: W. Eugene Smith. Scholastic Magazines, Inc.
Film: Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film: Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film: Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.
Film: Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Slide/Tape: Time, Place, and Subject: Responding to the Moment. Media Loft, Inc.
Slide/Tape: On Assignment: The Photojournalists, Parts I and II. Media Loft, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 29 and 30. Joel A. Benedict.
Photography, 2nd ed., Chapters 14 and 15. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 1 and 14. Charles Swedlund.
Photojournalism, Chapters 1, 2, and 6. Arthur Rothstein.

Application

DUTY AREA

8. DOCUMENTING PEOPLE AND EVENTS

TASK / COMPETENCY

8.2 Photograph an environmental portrait

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

8.2

PERFORMANCE OBJECTIVE

P8.2 Given a 35mm single lens reflex camera, a selection of lenses and other accessories, a selection of black and white films, and a working darkroom, photograph an environmental portrait of a person with 100 percent accuracy according to instructor's written checklist.

SELECTED ENABLING OBJECTIVES

E8.2.1 Define the following terms related to environmental portraiture: portrait, environmental portrait, subject, background, setting, atmosphere, mood, personality, expression, occupation, portrait lens, normal lens, lighting, existing light, metering, reflector, posing, staging, and candid.
E8.2.2 Operate correctly a 35mm single lens reflex camera with a 50mm (normal) lens with medium speed and fast speed films in a variety of normal lighting situations.
E8.2.3 Obtain press pass and model or client release forms.
E8.2.4 State the objective of the shooting assignment on photographing an environmental portrait.
E8.2.5 Cite fundamental rules of professional conduct for photographers working on location.
E8.2.6 Scout out location, obtain background information on subject, gain authorization to shoot, and make other preshooting arrangements.
E8.2.7 Determine lighting requirements, including need for additional lighting equipment.
E8.2.8 Select appropriate film for subject and lighting conditions.
E8.2.9 Clarify assignment, determine types of shots required, and plan shooting schedule.
E8.2.10 Determine camera positions and angles.
E8.2.11 Check equipment and supplies.
E8.2.12 Process film, produce and edit contact sheet, and produce enlargements on fiber-based paper.
E8.2.13 Prepare work for submission and for portfolio.
E8.2.14 Critique environmental portraits.

CRITERION-REFERENCED MEASURE

C8.2 Photograph an environmental portrait of a person with 100 percent accuracy according to instructor's written checklist.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to environmental portraiture (E8.2.1).
2. Review use of equipment as needed (E8.2.2).
3. Identify and discuss procedures for photographing portraits in an environmental setting; have students cite standards for professional conduct and list special requirements or considerations for this type of photography (E8.2.3-E8.2.11).
4. Have students analyze photographic examples of environmental portraits (E8.2.1, E8.2.14).
5. Assign reading in text (E8.2.1-E8.2.14).
6. Assign a practice exercise to photograph environment portraits of familiar subjects in familiar locations and have students critique their work (E8.2.2-E8.2.11).
7. Give actual environmental portrait assignments to be shot on location (E8.2.1-E8.2.14).
8. Have students process film, produce and edit contact sheets, and print enlargements (E8.2.12).
9. Have students label, mount, and include enlargements in portfolio (E8.2.13).
10. Have students critique one another's work (E8.2.14).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm black and white film (ASA 125 and 400)
Selection of standard lenses
Photoflood or tungsten lamps with reflectors and stands, as needed
Tripod
Cable release
Selection of filters
Teacher-prepared model release forms
Teacher-prepared ID stamps or forms
Teacher-prepared exposure data recording forms
Teacher-prepared checklist on environmental portrait photography
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

Film: *Images of Man, I: Cornell Capa*. Scholastic Magazines, Inc.
Film: *Images of Man, I: Bruce Davidson*. Scholastic Magazines, Inc.
Film: *Images of Man, I: Don McCullin*. Scholastic Magazines, Inc.
Film: *Images of Man, I: W. Eugene Smith*. Scholastic Magazines, Inc.
Film: *Images of Man, II: William Alber Allard*. Scholastic Magazines, Inc.
Film: *Images of Man, II: Brian Lanker*. Scholastic Magazines, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapters 14 and 15. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 1 and 4. Charles Swedlund.

Application

DUTY AREA

8. DOCUMENTING PEOPLE AND EVENTS

TASK / COMPETENCY

8.3 Produce a spot news photograph under a deadline

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

8.3

PERFORMANCE OBJECTIVE

P8.3 Given a 35mm single lens reflex camera, a selection of lenses, a selection of black and white films, necessary accessories, access to a news (public) event, and a working darkroom, photograph the event and produce a black and white newspaper-ready glossy 5 x 7 print within six class hours with 100 percent accuracy according to instructor's written checklist.

SELECTED ENABLING OBJECTIVES

E8.3.1 Define the following terms related to newspaper photography: shooting, spot news photo, feature photography, photo essay, public vs. private event, illustrative vs. editorial, reproduction, publication, camera-ready, low-contrast, glossy, cropping, and captioning.
E8.3.2 Operate correctly a 35mm single lens reflex camera with medium speed and fast speed black and white films, a selection of standard lenses, and other accessories in a variety of common lighting situations.
E8.3.3 Obtain press pass and model or client release forms.
E8.3.4 State objective of the shooting assignment on producing a spot news photograph under a deadline.
E8.3.5 Cite fundamental rules of professional conduct for photographers working on location.
E8.3.6 Scout out location, obtain background information on the event, people, and facilities, gain authorization to shoot, and make other preshooting arrangements.
E8.3.7 Determine lighting requirements, including the need for flash, if permissible.
E8.3.8 Select appropriate film for subject and lighting conditions.
E8.3.9 Clarify assignment, determine types of shots required, and plan shooting schedule.
E8.3.10 Determine camera positions and angles.
E8.3.11 Prepare equipment and check supplies.
E8.3.12 Maintain a shooting record, including technical data.
E8.3.13 Process black and white film, make black and white contact sheet, and produce enlargements on resin-coated paper under a deadline of two hours.
E8.3.14 Complete post-shooting requirements and label work for submission.
E8.3.15 Critique spot news photographs.

CRITERION-REFERENCED MEASURE

C8.3 Photograph a news event and produce a newspaper-ready glossy black and white 5 x 7 print within six class hours with 100 percent accuracy according to instructor's written checklist.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to news photography (E8.3.1).
2. Review use of equipment as needed (E8.3.2).
3. Identify and discuss procedures for photographing news events; have students cite standards for professional conduct and list special requirements for photographic assignments of this type (E8.3.3-E8.3.12).
4. Have students analyze a variety of spot news photographs; ask students to collect and display two or three examples of effective news shots (E8.3.1-E8.3.15).
5. Demonstrate how to use and maintain a shooting record (E8.3.12).
6. Assign reading in text (E8.3.1-E8.3.15).
7. Assign practice exercises in photographing school news events in a familiar setting; have students critique their work (E8.3.1-E8.3.15).
8. Invite a guest editor to visit the class and give an actual news assignment, show examples of news photos, discuss the news photography field, and help students critique work by acting as an editor-in-chief (E8.3.1-E8.3.15).
9. Have students process film, produce and edit contact sheets, and produce enlargements on resin-coated paper within a time limit of two hours (E8.3.13).
10. Have students prepare work for submission and for portfolios (E8.3.14).
11. Have students critique one another's work (E8.3.15).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm black and white film
(ASA 125 and 400)
Selection of standard lenses
Flash unit and bracket
Tripod
Cable release
Selection of filters
Teacher-prepared press passes and model release forms
Teacher-prepared ID stamp or forms
Teacher-prepared exposure data recording forms
Teacher-prepared checklist on spot news photography under deadline
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

Film: Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.

SELECTED REFERENCES

News Photographer. National Press Photographers Association.
Photography, 2nd ed., Chapter 15. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 1. Charles Swedlund.
Photojournalism, Chapters 1, 2, and 6. Arthur Rothstein.

DUTY AREA

8. DOCUMENTING PEOPLE AND EVENTS

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

TASK/COMPETENCY

8.4 Produce a documentary photo-essay

COURSE

Commercial Photography I (8607)

8.4

PERFORMANCE OBJECTIVE

P8.4 Given a 35mm single lens reflex camera, standard accessories, a selection of films, and a list of possible ideas, produce a documentary photo-essay containing a minimum of five images with 100 percent accuracy according to the instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E8.4.1 Define the following terms related to producing a documentary photo-essay: theme, subject, technique, visual element, locations, sequence, series, montage, layout, spread, text, story, caption, title, visual language, visual impact, human interest, composition, design, picture editor, art director, spot news photograph vs. feature photograph, photo illustration, picture story, photo essay, reproduction, publication, camera-ready, cropping, editing, and picture credits.
E8.4.2 Explore possible ideas for a photo-essay and select one.
E8.4.3 Operate correctly a 35mm single lens reflex camera with medium speed and fast speed black and white films, a selection of standard lenses, and other accessories in a variety of common lighting situations.
E8.4.4 Obtain press pass and model or client release forms.
E8.4.5 State objective of the shooting assignment on producing a documentary photo-essay.
E8.4.6 Cite fundamental rules of professional conduct for photographers working on location.
E8.4.7 Scout out location, obtain background information on the event, people, and facilities, gain authorization to shoot, and make other preshooting arrangements.
E8.4.8 Determine lighting requirements, including need for additional lighting equipment.
E8.4.9 Select appropriate film for subject and lighting conditions.
E8.4.10 Clarify assignment, determine types of shots required, and plan shooting schedule.
E8.4.11 Determine camera positions and angles.
E8.4.12 Prepare equipment and check supplies.
E8.4.13 Maintain a shooting record, including technical data.
E8.4.14 Process film, produce and edit contact sheets, and produce a minimum of five enlargements on fiber-based paper.
E8.4.15 Prepare work for submission and portfolio.
E8.4.16 Critique documentary photo-essays.

CRITERION-REFERENCED MEASURE

C8.4 Produce a documentary photo-essay containing a minimum of five images with 100 percent accuracy according to the instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to photo-essays; display samples of slide and print photo-essays; have students analyze photographic examples (E8.4.1-E8.4.16).
2. Have students brainstorm and select ideas for photo-essays (E8.4.2).
3. Discuss techniques, procedures, and professional practices relative to producing documentary photo-essays (E8.4.1-E8.4.16).
4. Assign readings in text (E8.4.1-E8.4.16).
5. Give students an assignment sheet with specific instructions for producing a documentary photo-essay (E8.4.1-E8.4.16).
6. Have students process work and produce a minimum of five enlargements (E8.4.14).
7. Have students critique one another's work (E8.4.16).
8. Have students prepare work for submission and for portfolios (E8.4.15).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
Selection of lenses
Selection of 35mm films
Tripod
Selection of filters
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared guidelines for producing a documentary photo-essay

SELECTED AUDIOVISUAL MATERIALS

Film: Images of Man, I: Cornell Capa. Scholastic Magazines, Inc.
Film: Images of Man, I: Bruce Davidson. Scholastic Magazines, Inc.
Film: Images of Man, I: Don McCullin. Scholastic Magazines, Inc.
Film: Images of Man, I: W. Eugene Smith. Scholastic Magazines, Inc.
Film: Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film: Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film: Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.
Film: Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Slide/Tape: On Assignment: The Photojournalists, Parts I and II. Media Loft, Inc.
Slide/Tape: The Photographic Essay: A Certain Time--A Certain Place (#643). The Center for Humanities, Inc.

SELECTED REFERENCES

News Photographer. National Press Photographers Association.
Photography, 2nd ed., Chapter 15. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 1. Charles Swedlund.
Photojournalism, Chapter 1, 2, 4, 5, 7, and 10. Arthur Rothstein.
The Time/Life Library of Photography. Time/Life Books.

DUTY AREA

9. PHOTOGRAPHING ARCHITECTURAL SUBJECTS AND LANDSCAPES

TASKS/COMPETENCIES

9.1 Photograph an architectural exterior

9.2 Photograph an architectural interior

9.3 Photograph a landscape (urban, rural)

DUTY AREA

9. PHOTOGRAPHING ARCHITECTURAL SUBJECTS AND LANDSCAPES

TASK/COMPETENCY

9.1 Photograph an architectural exterior

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

9.1

PERFORMANCE OBJECTIVE

P9.1 Given an architectural exterior and the appropriate photographic equipment, photograph the exterior to produce one overall shot and one detail shot. Performance must be 90 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E9.1.1 Identify and define the following terms pertaining to photographing architectural exteriors: fill flash, perspective, level, architectural grid, tripod, cable release, fine-grain film, high contrast, large format photography, reflectors, parallax control, wide angle lens, incident exposure, standard 18% neutral gray card, strobe units, tungsten lights, slave units, and tungsten film.

E9.1.2 Select subject and analyze in terms of compositional design.

E9.1.3 List the equipment necessary to photograph architectural exteriors.

E9.1.4 Outline and demonstrate the procedure for shooting designated architectural exteriors. Include overall shots and detail shots.

E9.1.5 Critique photographs of architectural subjects.

E9.1.6 Process film, print and edit a contact sheet, and make enlargements of selected shots.

E9.1.7 Prepare work for submission or portfolio.

CRITERION-REFERENCED MEASURE

C9.1 Photograph an architectural exterior, including an overall shot and a shot of details, such as windows, doors, siding, brickwork, or interesting angles. Performance must be 90 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to photographing architectural exteriors (E9.1.1).
2. Have students observe and discuss compositional design for architectural exteriors (E9.1.2).
3. Have students analyze photographic examples of architectural exteriors (E9.1.5).
4. Have students identify and demonstrate use of the equipment necessary to photograph the exterior of a building (E9.1.3).
5. Demonstrate the procedure for photographing overall and detail shots of architectural exteriors (E9.1.4).
6. Assign reading in text (E9.1.1-E9.1.7).
7. Have students shoot, process, and print overall and detail shots of architectural exteriors (E9.1.4, E9.1.5).
8. Have student prepare enlargements for portfolio or submission and critique one another's work (E9.1.5-E9.1.7).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm black and white film
(ASA 125 or 400)
Tripod
Cable release
Exposure meter
Standard 18% neutral gray card
Level
Working darkroom/photofinishing lab
(See Appendix D, #11-14)
Contrast and/or color compensating filters
Teacher-prepared guidelines for photographing architectural exteriors

SELECTED AUDIOVISUAL MATERIALS

Film: Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Teacher-prepared slide presentation on architectural photography

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 28 and 30. Joel A. Benedict.
Photography, 2nd ed. Barbara Upton and John Upton.
Photography, 2nd ed. Charles Swedlund.

Application

DUTY AREA

9. PHOTOGRAPHING ARCHITECTURAL SUBJECTS AND LANDSCAPES

TASK/COMPETENCY

9.2 Photograph an architectural interior

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

9.2

PERFORMANCE OBJECTIVE

P9.2 Given an architectural interior and the appropriate photographic equipment, photograph the building interior to produce one overall shot and one detail shot. Performance must be 90 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E9.2.1 Identify and define the following terms pertaining to photographing architectural interiors: fill flash, perspective, level, architectural grid, tripod, cable release, fine-grain film, high contrast, large format photography, reflectors, parallax control, wide angle lens, incident exposure, standard 18% neutral gray card, strobe units, tungsten lights, slave units, and tungsten.

E9.2.2 Select subject and analyze in terms of compositional design.

E9.2.3 List the equipment necessary to photograph an architectural interior.

E9.2.4 Outline the procedure for photographing a designated architectural interior.

E9.2.5 Critique photographs of architectural interiors.

E9.2.6 Process film, print and edit contact sheet, and make enlargements of selected shots.

E9.2.7 Prepare work for submission or portfolio.

CRITERION-REFERENCED MEASURE

C9.2 Photograph an architectural interior to produce an overall shot and a detail shot. Performance must be 90 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to photographing architectural interiors (E9.2.1).
2. Have students observe and discuss compositional design for architectural interiors (E9.2.2).
3. Have students identify and demonstrate use of the equipment necessary to photograph the interior of a building (E9.2.3).
4. Have students analyze photographic examples of architectural interiors (E9.2.5).
5. Demonstrate the procedure for photographing overall and detail shots of of architectural interiors (E9.2.4).
6. Assign reading in text (E9.2.1-E9.2.7).
7. Supervise student practice in shooting, processing, printing, and critiquing photographs of architectural interiors (E9.2.2-E9.2.7).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm black and white film
  (ASA 125 or 400)
Tripod
Cable release
Exposure meter
Standard 18% neutral gray card
Level
Strobe units with slave units
Tungsten lights
Reflectors
PC extension cords
Contrast and/or color compensating filter
Working darkroom/photoginishing lab
  (See Appendix D, #11-14)
Teacher-prepared guidelines for photographing
  architectural interiors

SELECTED AUDIOVISUAL MATERIALS

Teacher-prepared slide presentation on architectural photography

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 29 and 30. Joel A. Benedict.
Photography, 2nd ed. Barbara Upton and John Upton.
Photography, 2nd ed. Charles Swedlund.

Application

DUTY AREA

9. PHOTOGRAPHING ARCHITECTURAL SUBJECTS AND LANDSCAPES

TASK/COMPETENCY

9.3 Photograph a landscape (urban, rural)

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

9.3

PERFORMANCE OBJECTIVE

P9.3 Given access to an urban or rural landscape and the appropriate photographic equipment, photograph and produce a black and white or color print of the landscape. Performance must be 90 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E9.3.1 Identify and define the following landscape photography terms: field camera, large format photography, tripod, cable release, filters, incident and reflected light meters, and zone system.

E9.3.2 List the equipment necessary to produce urban or rural landscape images.

E9.3.3 Outline procedure for photographing a designated urban or rural landscape.

E9.3.4 Critique photographic examples of rural and urban landscapes.

E9.3.5 Process film, print and edit contact sheet, and make enlargements of selected shots.

E9.3.6 Prepare work for submission or portfolio.

CRITERION-REFERENCED MEASURE

C9.3 Photograph an urban or rural landscape and produce one black and white or color print of the landscape. Performance must be 90 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to landscape photography (E9.3.1).
2. Have students analyze photographic examples of rural and urban landscapes (E9.3.4).
3. Have students select a location and observe and discuss compositional design for a landscape photograph (E9.3.3).
4. Identify and demonstrate use of equipment necessary to photograph the landscape (E9.3.2).
5. Demonstrate the procedure for photographing urban or rural landscapes (E9.3.3).
6. Assign reading in text (E9.3.1-E9.3.6).
7. Supervise student practice in shooting, processing, printing, and critiquing photographs of urban and rural landscapes (E9.3.3-E9.3.6).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
35mm black and white film (ASA 125 or 400)
Tripod
Cable release
Exposure meter
Standard 18% neutral gray card
Level
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Contrast and/or color compensating filters
Teacher-prepared guidelines for photographing landscapes

SELECTED AUDIOVISUAL MATERIALS

Film: Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film: Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film: Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Slide/Tape: Moments Within Us: Exploring the Photographic Essay. Media Loft, Inc.
Slide/Tape: On Assignment: The Photojournalists, Parts I and II. Media Loft, Inc.
Slide/Tape: Shedding Light on Light. Media Loft, Inc.
Slide/Tape: To Dream with Open Eyes. Media Loft, Inc.
Teacher-prepared slide presentation on the methods of shooting landscapes and the compositional design of various professional landscape photographers

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 28 and 35. Joel A. Benedict.
Photography, 2nd ed. Barbara Upton and John Upton.
Photography, 2nd ed. Charles Swedlund.

DUTY AREA

10. PHOTOGRAPHING FOR CREATIVE EFFECT AND SELF-EXPRESSION

TASKS/COMPETENCIES

10.1 Create an image to communicate a message

10.2 Create an image to convey a mood or emotion

10.3 Create a photographic series based on visual design

10.4 Create a photographic sequence based on time (photo story)

10.5 Create a photographic essay based on a subject, concept, or theme

DUTY AREA

10. PHOTOGRAPHING FOR CREATIVE EFFECT AND SELF-EXPRESSION

TASK/COMPETENCY

10.1 Create an image to communicate a message

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

10.1

PERFORMANCE OBJECTIVE

P10.1 Given the appropriate photographic equipment, supplies, and a working darkroom, create a photographic image that communicates a message to the viewer. Performance must be 80 percent successful according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E10.1.1 Define and explain the following key terms and concepts related to photographic communication and visual language: communication, imagery, visual design, visual language, suggestion, association, symbolism, and persuasion.

E10.1.2 Evaluate the effects of the following photographic techniques and elements on the viewer: editing, cropping, composition, distortion due to lenses, size of image, magnification, angle, setting, props, staging, candid, visual symbol, shape, color, and lighting.

E10.1.3 Outline the history of photographic expression.

E10.1.4 Demonstrate mastery in operating basic 35mm photographic equipment.

E10.1.5 Demonstrate mastery of basic darkroom procedures.

E10.1.6 Critique examples of photographs that communicate a message.

E10.1.7 Prepare work for submission or portfolio.

CRITERION-REFERENCED MEASURE

C10.1 Create a photographic image that communicates a message to the viewer. Performance must be 80 percent successful according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to communicating a message by means of photographic imagery (E10.1.1).
2. Illustrate and discuss the effects of various photographic techniques on the viewer; have students analyze photographic examples (E10.1.2-E10.1.6).
3. Have students collect, display, and discuss examples of photographic images that communicate a message (E10.1.2-E10.1.6).
4. Have students outline the history of photographic expression (E10.1.3).
5. Assign a practice exercise in creating photographic images that communicate a message, and have students critique one another's work (E10.1.4-E10.1.6).
6. Have students make and mount enlargements for portfolios (E10.1.7).
7. Assign readings on the history and techniques of photographic expression (E10.1.1-E10.1.7).
8. Have students critique completed work (E10.1.6).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
Selection of lenses
Selection of filters
Tripod
Cable release
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared guidelines on communicating a message with a photographic image

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	Control and Command: Exposure as a Creative Force. Media Loft, Inc.
Slide/Tape:	Expanding Photographic Vision: The Sight and Insight of Ernst Haas, Part II. Media Loft, Inc.
Film:	Images of Man, I: Cornell Capa. Scholastic Magazines, Inc.
Film:	Images of Man, I: Bruce Davidson. Scholastic Magazines, Inc.
Film:	Images of Man, I: Don McCullin. Scholastic Magazines, Inc.
Film:	Images of Man, I: W. Eugene Smith. Scholastic Magazines, Inc.
Film:	Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film:	Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film:	Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.
Film:	Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Slide/Tape:	Inroads and Outroads: How Donald McCullin Photographs Combat and the Struggle to Survive. Media Loft, Inc.
Sound/Slide:	Learning to See and Understand: Developing Visual Literacy. The Center for Humanities, Inc.
Slide/Tape:	Moments Within Us: Exploring the Photographic Essay. Media Loft, Inc.
Sound/Slide:	A Picture's Worth a Thousand Words: Interpreting Visual Information. The Center for Humanities, Inc.
Slide/Tape:	Rich Clarkson! Anatomy of a Photo Director. Media Loft, Inc.
Slide/Tape:	Shedding Light on Light. Media Loft, Inc.
Slide/Tape:	Thinking Photographically. Media Loft, Inc.
Slide/Tape:	To Dream With Open Eyes. Media Loft, Inc.
Slide/Tape:	To Explore and Express. Media Loft, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapters 1, 9, and 14-16. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 1 and 14. Charles Swedlund.
Photojournalism, Chapters 2, 3, and 6. Arthur Rothstein.

Application

DUTY AREA

10. PHOTOGRAPHING FOR CREATIVE EFFECT AND SELF-EXPRESSION

TASK/COMPETENCY

10.2 Create an image to convey a mood or emotion

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

10.2

PERFORMANCE OBJECTIVE

P10.2 Given the appropriate photographic equipment, supplies, and a working darkroom, create a photographic image that conveys a definite mood or emotion. Performance must be 80 percent successful according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E10.2.1 Define and explain the following key terms and concepts related to conveying a mood or emotion through photographic imagery: mood, emotion, imagery, visual design, visual language, suggestion, association, and symbolism.

E10.2.2 Evaluate the effects of the following visual techniques and elements on the viewer: light quality, texture, tone or color, line and shape, composition, use of space, use of framing or cropping, symmetry vs. asymmetry, size of image, magnification, focus, diffusion, intentional blur, distortion due to lenses, contrast, angle, and setting.

E10.2.3 Outline the history of photographic expression.

E10.2.4 Demonstrate mastery in operating basic 35mm photographic equipment.

E10.2.5 Demonstrate mastery of basic darkroom procedures.

E10.2.6 Critique examples of photographs that convey a mood or emotion.

E10.2.7 Prepare work for submission or portfolio.

CRITERION-REFERENCED MEASURE

C10.2 Create a photographic image that conveys a definite mood or emotion. Performance must be 80 percent successful according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to photography that conveys a mood or emotion (E10.2.1).
2. Illustrate and discuss the elements of design and the effects of various photographic techniques on the viewer; have students analyze photographic examples (E10.2.2).
3. Outline a brief history of creative photography and visual imagery (E10.2.3).
4. Have students collect, display, and discuss examples of photographic images that convey a mood or emotion (E10.2.2).
5. Assign an exercise in creating images that convey a mood or emotion, and have students critique one another's work (E10.2.4-E10.2.6).
6. Have students make and mount enlargements for portfolios (E10.2.7).
7. Assign reading on the techniques and history of creative photography (E10.2.1-E10.2.7).
8. Have students write a critique or review on one or more photographs (E10.2.6).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
Selection of lenses
Selection of filters
Tripod
Cable release
Working darkroom/photofinishing lab (See Appendix D, #11-14)
A selection of magazines, record album covers, and posters
Teacher-prepared guidelines on photos that convey mood or emotion

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Control and Command: Exposure as a Creative Force. Media Loft, Inc.
Slide/Tape: Expanding Photographic Vision: The Sight and Insight of Ernst Haas, Part II. Media Loft, Inc.
Film: Images of Man, I: Cornell Capa. Scholastic Magazines, Inc.
Film: Images of Man, I: Bruce Davidson. Scholastic Magazines, Inc.
Film: Images of Man, I: Don McCullin. Scholastic Magazines, Inc.
Film: Images of Man, I: W. Eugene Smith. Scholastic Magazines, Inc.
Film: Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film: Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film: Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.
Film: Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Sound/Slide: Learning to See and Understand: Developing Visual Literacy. The Center for Humanities, Inc.
Sound/Slide: A Picture's Worth a Thousand Words: Interpreting Visual Information. The Center for Humanities.
Slide/Tape: Shedding Light on Light. Media Loft, Inc.
Slide/Tape: Thinking Photographically. Media Loft, Inc.
Slide/Tape: To Dream With Open Eyes. Media Loft, Inc.
Slide/Tape: To Explore and Express. Media Loft, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapters 1, 9, and 14-16. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 1 and 14. Charles Swedlund.
Photojournalism, Chapters 2, 3, and 6. Arthur Rothstein.

Application

DUTY AREA

10. PHOTOGRAPHING FOR CREATIVE EFFECT AND SELF-EXPRESSION

TASK/COMPETENCY

10.3 Create a photographic series based on visual design

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

10.3

PERFORMANCE OBJECTIVE

P10.3 Given the appropriate photographic equipment, supplies, and a working darkroom, create a photographic series based on visual design elements or principles. Performance must be 80 percent successful according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E10.3.1 Define and explain the following key terms and concepts related to producing a photographic series based on visual design elements and principles: visual design, visual language, series, light quality, texture, tone, color, pattern, line, shape, composition, space, angle, framing, contrast, balance, symmetry, and asymmetry.

E10.3.2 Evaluate the effects of various visual design elements and principles on the viewer.

E10.3.3 Outline the history of photographic expression and identify the works of major artists.

E10.3.4 Demonstrate mastery in operating basic 35mm photographic equipment.

E10.3.5 Demonstrate mastery of basic darkroom procedures.

E10.3.6 Critique examples of photographic series based on visual design.

E10.3.7 Prepare work for submission or portfolio.

CRITERION-REFERENCED MEASURE

C10.3 Create a photographic series based on visual design elements or principles. Performance must be 80 percent successful according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Define and discuss key terms and concepts related to the elements and principles of visual design (E10.3.1).
2. Illustrate and discuss the elements of visual design and the effects of various photographic techniques on the viewer; have students analyze examples of photographic series based on visual design (E10.3.2-E10.3.6).
3. Outline a brief history of photographic expression, and describe the techniques and works of Edward Weston, Minor White, Ralph Gibson, Eva Rubinstein, Ernst Haas, and other major photographers (E10.3.3).
4. Have students collect, display, and discuss examples of photographic series based on visual design elements or principles (E10.3.2-E10.3.6).
5. Assign exercises in creating photographic series based on visual design and have students critique one another's work (E10.3.4-E10.3.6).
6. Have students make and mount enlargements for portfolios (E10.3.7).
7. Assign reading in the history of photographic expression and use of visual design (E10.3.1-E10.3.7).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
Selection of lenses
Selection of filters
Tripod
Cable release
Teacher-prepared guidelines for photographic series based on visual design
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: *Expanding Photographic Vision: The Sight and Insight of Ernst Haas*, Part II. Media Loft, Inc.
Sound/Slide: *Learning to See and Understand: Developing Visual Literacy*. The Center for Humanities, Inc.
Sound/Slide: *A Picture's Worth a Thousand Words: Interpreting Visual Information*. The Center for Humanities, Inc.
Slide/Tape: *Point of Departure: Developing a Creative Approach to Photography and its Publication*. Media Loft, Inc.
Slide/Tape: *To Dream With Open Eyes*. Media Loft, Inc.
Slide/Tape: *To Explore and Express*. Media Loft, Inc.
Slide/Tape: *The Weston Eye: Composition, Detail, and the Large Format Image*. Media Loft, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Part 2, Chapter 3. Joel A. Benedict.
The Creation. Ernest Haas.
Deja Vu. Ralph Gibson.
Edward Weston: His Life and Photographs. Ben Maddow.
Edward Weston: The Flame of Recognition. Edward Weston.
Minor White: Rites and Passages. Minor White.
Photo Explorations, AT-16AA, Chapters 2-5 and 28-33. Kodak.
Photography, 2nd ed., Chapter 14. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 29-31. Charles Swedlund.
The Somnambulist. Ralph Gibson.

DUTY AREA

10. PHOTOGRAPHING FOR CREATIVE EFFECT AND SELF-EXPRESSION

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

10.4 Create a photographic sequence based on time (photo story)

COURSE

Commercial Photography I (8607)

10.4

PERFORMANCE OBJECTIVE

P10.4 Given the appropriate photographic equipment, supplies, and a working darkroom, create a photographic sequence based on time by producing a minimum of five images. Performance must be 80 percent successful according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E10.4.1 Define and explain the following key terms and concepts related to photographic sequences: sequence, picture story, serial imagery, transition, chronological, narration, illustration, establishing shot, detail shot, close-ups, lead picture, cover shot, closing shot, shooting script, storyboard, text, dummy, layout, and photojournalism.

E10.4.2 Evaluate the effects of various photographic techniques and photo story elements on the viewer.

E10.4.3 Demonstrate mastery in operating basic 35mm photographic equipment.

E10.4.4 Demonstrate mastery of basic darkroom procedures.

E10.4.5 Demonstrate ability to produce a single image that communicates a message.

E10.4.6 Plan a simple shooting script and a simple storyboard.

E10.4.7 Outline the history of photographic expression.

E10.4.8 Demonstrate procedures of shooting photographic sequences based on time.

E10.4.9 Prepare work for submission or portfolio.

E10.4.10 Critique examples of photographic sequences based on time.

CRITERION-REFERENCED MEASURE

C10.4 Create a photographic sequence based on time by producing a minimum of five images. Performance must be 80 percent successful according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to photographic sequences (E10.4.1).
2. Demonstrate and discuss techniques for creating photographic sequences, explain how to plan a simple shooting script, and show to write a simple storyboard (E10.4.2, E10.4.5, E10.4.6).
3. Have students analyze examples of photographic sequences based on time and discuss effects of various photographic elements on the viewer (E10.4.2, E10.4.10).
4. Outline a brief history of the history of photographic expression (E10.4.7).
5. Assign students several photographic exercises, beginning with a simple two-picture sequence and advancing to a five-picture sequence (E10.4.3, E10.4.6, E10.4.8).
6. Have students who are ready for advanced work create a layout, reprint their photographs for proper sizing, and create a dummy for a magazine picture story (E10.4.9).
7. Have students critique results of exercises (E10.4.10).
8. Assign readings in text (E10.4.1-E10.4.10).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
Selection of lenses
Selection of filters
Tripod
Cable release
Teacher-prepared guidelines on photographic sequences based on time release
Working darkroom/photofinishing lab (See Appendix D, #11-14)

SELECTED AUDIOVISUAL MATERIALS

Sound/Slide:	Learning to See and Understand: Developing Visual Literacy. The Center for Humanities, Inc.
Slide/Tape:	Moments Within Us: Exploring the Photographic Essay. Media Loft, Inc.
Sound/Slide:	A Picture's Worth a Thousand Words: Interpreting Visual Information. The Center for Humanities, Inc.
Slide/Tape:	Point of Departure: Developing a Creative Approach to Photography and its Publication. Media Loft, Inc.
Slide/Tape:	Rich Clarkson! Anatomy of a Photo Director. Media Loft, Inc.
Slide/Tape:	Thinking Photographically. Media Loft, Inc.

SELECTED REFERENCES

Lens and Shutter, Part 2, Chapter 3. Harvey Weiss.
Photo Explorations, AT-16AA, Chapter 96. Kodak.
Photography, 2nd ed., pp. 19, 337, and 370-371. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 12, 384, and 390. Charles Swedlund.
Photojournalism, Chapters 4-6. Arthur Rothstein.

Application

DUTY AREA

10. PHOTOGRAPHING FOR CREATIVE EFFECT AND SELF-EXPRESSION

TASK/COMPETENCY

10.5 Create a photographic essay based on a subject, concept, or theme

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

10.5

PERFORMANCE OBJECTIVE

P10.5 Given the appropriate photographic equipment, supplies, and a working darkroom, create a photographic essay based on a subject, concept, or theme by producing a minimum of five images. Performance must be 80 percent successful according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E10.5.1 Define and explain the following key terms and concepts related to photographic essays: photographic subject, concept, and theme; sequencing; juxtaposition; photo-book; photo-montage; straight photography; experimental photography; intent; style; establishing shot; detail shot; lead picture; cover shot; closing shot; shooting script; storyboard; layout; dummy; and text.

E10.5.2 Identify the types of photographic essays and compare and contrast the differences among illustrative, narrative, documentary, editorial, photojournalistic, and personal vision essays.

E10.5.3 Demonstrate mastery in operating basic 35mm photographic equipment.

E10.5.4 Demonstrate mastery of basic darkroom procedures.

E10.5.5 Outline the history of photographic expression.

E10.5.6 Select subject, concept, or theme for photographic essay.

E10.5.7 Outline procedure for creating a photographic essay based on a specific concept, subject, or theme.

E10.5.8 Critique examples of photographic essays based on a subject, concept, or theme.

E10.5.9 Prepare work for submission or portfolio.

CRITERION-REFERENCED MEASURE

C10.5 Create a photographic essay based on a subject, concept, or theme by producing a minimum of five images. Performance must be 80 percent successful according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and explain key terms and concepts related to production of a photographic essay (E10.5.1).
2. Have students analyze examples of various types of photographic essays (E10.5.2).
3. Have student collect, display, and discuss examples of photographic essays based on a subject, a concept, or a theme (E10.5.2-E10.5.8).
4. Have students brainstorm ideas for photographic essays (E10.5.6).
5. Assign exercises in creating photographic essays (E10.5.3, E10.5.4, E10.5.6, E10.5.7).
6. Have students critique results of exercises (E10.5.8).
7. Have students make and mount enlargements for portfolios (E10.5.9).
8. Assign reading in texts, supplemental books, and magazine articles on selected photographers (E10.5.5).
9. Optional: Assign students a written report, to be illustrated with photographic examples, on a photographer of their choice; have them explore and describe the photographer's particular style, approach, subject, and point of view (E10.5.1-E10.5.9).

SELECTED TOOLS AND MATERIALS

35mm single lens reflex camera
Selection of lenses
Selection of filters
Tripod
Cable release
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared guidelines on photo essay production

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Before LIFE, The Camera Was a Man: Early European Photojournalism and its American Influence. Media Loft, Inc.
Slide/Tape: Control and Command: Exposure as a Creative Force. Media Loft, Inc.
Slide/Tape: Expanding Photographic Vision: The Sight and Insight of Ernst Haas, Part II. Media Loft, Inc.
Film: Images of Man, I: Cornell Capa. Scholastic Magazines, Inc.
Film: Images of Man, I: Bruce Davidson. Scholastic Magazines, Inc.
Film: Images of Man, I: Don McCullin. Scholastic Magazines, Inc.
Film: Images of Man, I: W. Eugene Smith. Scholastic Magazines, Inc.
Film: Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film: Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film: Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.
Film: Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Slide/Tape: Inroads and Outroads: How Donald McCullin Photographs Combat and the Struggle to Survive. Media Loft, Inc.
Slide/Tape: Moments Within Us: Exploring the Photographic Essay. Media Loft, Inc.
Slide/Tape: Shedding Light on Light. Media Loft, Inc.
Slide/Tape: Thinking Photographically. Media Loft, Inc.
Slide/Tape: Time, Place, and Subject: Responding to the Moment. Media Loft, Inc.
Slide/Tape: To Dream With Open Eyes. Media Loft, Inc.
Slide/Tape: To Explore and Express. Media Loft, Inc.
Slide/Tape: The Weston Eye: Composition, Detail, and the Large Format Image. Media Loft, Inc.

SELECTED REFERENCES

Lens and Shutter, Part 2, Chapter 3. Harvey Weiss.
Photo Explorations, AT-16AA. Kodak.
Photography, 2nd ed., Chapters 1, 14, and 15. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 1, 12, and 14. Charles Swedlund.
Photojournalism, Chapters 3-6. Arthur Rothstein.
The Time/Life Library of Photography. Time/Life Books.

DUTY AREA

11. USING STUDIO LIGHTING

TASKS/COMPETENCIES

11.1 Identify use and characteristics of studio equipment, lights, and accessories

11.2 Meter studio lighting

11.3 Shoot a passport or ID photograph

11.4 Shoot an individual studio portrait

11.5 Shoot a group studio portrait

11.6 Photograph, process, and present finished studio portraits

11.7 Photograph, process, and present finished studio still lifes

11.8 Create original lighting effects

DUTY AREA

11. USING STUDIO LIGHTING

TASK/COMPETENCY

11.1 Identify use and characteristics of studio equipment, lights, and accessories

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

11.1

PERFORMANCE OBJECTIVE

P11.1 Given a working photographic studio with the appropriate equipment, lights, and accessories, identify the use and characteristics of designated studio and lighting equipment with 100 percent accuracy according to instructor's written checklist.

SELECTED ENABLING OBJECTIVES

E11.1.1 Identify and define the following photo studio terms: backdrop, seamless, tripod, view camera, boom, strobe unit, slave unit, flash unit, tungsten lights, quartz lights, extension cords, grounded plug, strip lights, reflectors, soft box, diffusion screen, barndoors, snoot, light stand, standard 18% neutral gray card, and incident-light, reflected-light, and flash meters.

E11.1.2 List specific characteristics associated with various equipment, lights, and accessories.

CRITERION-REFERENCED MEASURE

C11.1 Identify the use and characteristics of designated studio and lighting equipment with 100 percent accuracy according to instructor's written checklist.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets on common photo studio-related terms; discuss terms (E11.1.1).
2. Demonstrate the various uses and characteristics of photo studio equipment, lights, and accessories (E11.1.2).
3. Assign reading in text (E11.1.1, E11.1.2).

SELECTED TOOLS AND MATERIALS

Working photo studio (See Appendix D, #6)
Teacher-prepared reference diagram of typical photo studio layout
Teacher-prepared checklist on studio and lighting equipment

SELECTED AUDIOVISUAL MATERIALS

Slide Tape: Control and Command: Exposure as a Creative Force. Media Loft, Inc.
AV Program: Lighting. Instructional Media Associates, Inc.
Slide Tape: Shedding Light on Light. Media Loft, Inc.
Slide/Tape: Thinking Photographically. Media Loft, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 38. Joel A. Benedict.
How to Control and Use Photographic Lighting. David Brooks.
Photography, 2nd ed., pp. 189-213. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 248-255. Charles Swedlund.

DUTY AREA

11. USING STUDIO LIGHTING

TASK/COMPETENCY

11.2 Meter studio lighting

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (84.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

11.2

PERFORMANCE OBJECTIVE

P11.2 Given an average photo studio set up with either flood lights or flash units, meter the resulting studio light with 100 percent accuracy according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E11.2.1 Identify and define the following terms and concepts related to exposure and metering studio light: incident light, reflected light, inverse square law, and incident-light, reflected-light, and flash meter readings.

E11.2.2 Demonstrate how to take various types of studio light meter readings.

E11.2.3 Interpret and solve specific exercises dealing with various studio light metering problems.

CRITERION-REFERENCED MEASURE

C11.2 Meter lighting for correct exposure in an average studio situation with 100 percent accuracy according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to the measurement of studio light (E11.2.1).
2. Demonstrate how to meter studio light in a variety of lighting situations; illustrate and discuss results of incorrect meter readings (E11.2.2).
3. Assign exercises in solving various studio light metering problems (E11.2.3).
4. Assign reading in text (E11.2.1-E11.2.3).

SELECTED TOOLS AND MATERIALS

Working photo studio (See Appendix D, #6)
Teacher-prepared display of photos that show results of correct and incorrect meter readings
Teacher-prepared guidelines on metering studio light

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Control and Command: Exposure as a Creative Force. Media Loft, Inc.
AV Program: Lighting. Instructional Media Associates, Inc.
Slide/Tape: Shedding Light on Light. Media Loft, Inc.
Slide/Tape: Thinking Photographically. Media Loft, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 38. Joel A. Benedict.
How to Control and Use Photographic Lighting. David Brooks.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 246-265. Charles Swedlund.

Application

DUTY AREA

11. USING STUDIO LIGHTING

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

TASK/COMPETENCY

11.3 Shoot a passport or ID photograph

COURSE

Commercial Photography I (8607)

11.3

PERFORMANCE OBJECTIVE

P11.3 Given a model, a working studio with lights, accessories, camera, and film, shoot a standard passport or ID photograph with 100 percent accuracy according to instructor's written checklist.

SELECTED ENABLING OBJECTIVES

E11.3.1 Identify and define the following lighting and portrait terms: head-and-shoulders shot, full front portrait, flat lighting, 45° angle, bounce light, soft light, and fill light.

E11.3.2 Set up a standard two-light, 45° angle lighting situation.

E11.3.3 Position and pose subject for head-and-shoulders shot.

E11.3.4 Critique passport or ID photographs.

CRITERION-REFERENCED MEASURE

C11.3 Shoot a standard passport or ID photograph with 100 percent accuracy according to instructor's written checklist.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to lighting and passport or ID portraiture (E11.3.1).

2. Demonstrate how to set up a standard two-light, 45° angle lighting situation (E11.3.2).

3. Have students analyze examples of passport or ID photographs (E11.3.4).

4. Have students practice giving posing or positioning instructions to models (E11.3.3).

5. Have students take passport or ID photographs of one another (E11.3.2, E11.3.3).

6. Have students critique results of practice exercises in taking ID or passport photographs (E11.3.4).

7. Assign reading in text (E11.3.1-E11.3.4).

SELECTED TOOLS AND MATERIALS

Working photo studio (See Appendix D, #6)
35mm or 120mm camera
35mm or 120mm film
Examples of ID and passport photographs
Teacher-prepared checklist for passport/ID photographs

SELECTED AUDIOVISUAL MATERIALS

AV Program: Lighting. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 38. Joel A. Benedict.
How to Control and Use Photographic Lighting. David Brooks.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 246-265. Charles Swedlund.

Application

DUTY AREA

11. USING STUDIO LIGHTING

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

TASK/COMPETENCY

11.4 Shoot an individual studio portrait

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

11.4

PERFORMANCE OBJECTIVE

P11.4 Given access to a model, a working studio with lights, accessories, camera, and film, shoot a standard individual portrait with 100 percent accuracy according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E11.4.1 Review lighting and portrait terms (refer to E11.3.1).

E11.4.2 Set up and shoot a standard studio portrait of an individual.

E11.4.3 Critique studio portraits.

CRITERION-REFERENCED MEASURE

C11.4 Shoot a standard studio portrait of an individual with 100 percent accuracy according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review lighting and portrait terms (E11.4.1).
2. Have students analyze photographic examples of studio portraits (E11.4.3).
3. Demonstrate procedures for posing subjects for studio portraits (E11.4.2).
4. Demonstrate how to set up and shoot a standard studio portrait of an individual (E11.4.2).
5. Give students exercises in shooting individual studio portraits; have them critique one another's work (E11.4.2, E11.4.3).
6. Assign reading in text (E11.4.1-E11.4.3).
7. Invite a professional photographer to discuss and demonstrate individual studio portrait shooting procedures and techniques (E11.4.1-E11.4.3).

SELECTED TOOLS AND MATERIALS

Working photo studio (See Appendix D, #6)
35mm or 120mm camera
35mm or 120mm film
Examples of studio portraits
Teacher-prepared guidelines for individual studio portraits

SELECTED AUDIOVISUAL MATERIALS

AV Program: Lighting. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 38. Joel A. Benedict.
How to Control and Use Photographic Lighting. David Brooks.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 246-265. Charles Swedlund.

DUTY AREA

11. USING STUDIO LIGHTING

TASK/COMPETENCY

11.5 Shoot a group studio portrait

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

11.5

PERFORMANCE OBJECTIVE

P11.5 Given access to models, a working studio with lights, accessories, and film, shoot a standard group portrait with 100% accuracy according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E11.5.1 Review lighting and portrait terms (refer to E.11.3.1).

E11.5.2 Set up and shoot a standard studio group portrait.

E11.5.3 Critique studio group portraits.

CRITERION-REFERENCED MEASURE

C11.5 Shoot a standard studio group portrait with 100 percent accuracy according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review lighting and portrait terms (E11.5.1).
2. Have students analyze photographic examples of group studio portraits (E11.5.3).
3. Demonstrate procedures and technique for posing subjects for studio group portraits (E11.5.2).
4. Demonstrate how to set up and shoot a standard studio group portrait (E11.5.2).
5. Give students exercises in setting up and shooting group studio portraits, using different sizes and types of groups (E11.5.2).
6. Have students critique one another's work (E11.5.3).
7. Invite a professional photographer to discuss and demonstrate group portrait shooting procedures and techniques (E11.5.1-E11.5.3).

SELECTED TOOLS AND MATERIALS

Working photo studio (See Appendix D, #6)
35mm or 120mm camera
35mm or 120mm film
Examples of group studio portraits
Teacher-prepared guidelines for group studio portraits

SELECTED AUDIOVISUAL MATERIALS

AV Program: Lighting. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 38. Joel A. Benedict.
How to Control and Use Photographic Lighting. David Brooks.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 246-265. Charles Swedlund.

Application

DUTY AREA

11. USING STUDIO LIGHTING

TASK/COMPETENCY

11.6 Photograph, process, and present finished studio portraits

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

11.6

PERFORMANCE OBJECTIVE

P11.6 Given a working studio, a working darkroom/photo lab, and models, shoot, process, and present one individual and one group finished studio portrait. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E11.6.1 Review studio, lighting, and portrait terms (refer to E11.1.1 and E11.3.1).

E11.6.2 Demonstrate various methods of processing and printing studio portraits.

E11.6.3 Demonstrate how to present finished studio portraits.

E11.6.4 Critique finished studio portraits.

CRITERION-REFERENCED MEASURE

C11.6 Photograph, process, and present one individual and one group finished studio portrait. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key concepts and terms related to photographing, processing, printing, and finishing studio portraits (E11.6.1).

2. Have students identify and describe various methods used to process and print studio portraits; demonstrate selected methods as needed (E11.6.1).

3. Demonstrate how to present finished portraits (E11.6.3).

4. Have students analyze photographic examples of finished studio portraits (E11.6.4).

5. Give students exercises in processing, printing, and finishing studio portraits (E11.6.2, E11.6.3).

6. Have students critique one another's work (E11.6.4).

7. Have students prepare photographs for submission or portfolios (E11.6.3).

SELECTED TOOLS AND MATERIALS

Working photo studio (See Appendix D, #6)
35mm or 120mm camera
35mm or 120mm film
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared guidelines for shooting, processing, and presenting studio portraits

SELECTED AUDIOVISUAL MATERIALS

AV Program: Lighting. Instructional Media Associates, Inc.

SELECTED REFERENCES

Advertising Photography. Allyn Salomon.
Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 38. Joel A. Benedict.
How to Control and Use Photographic Lighting. David Brooks.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 246-265. Charles Swedlund.

Application

DUTY AREA

11. USING STUDIO LIGHTING

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

TASK/COMPETENCY

11.7 Photograph, process, and present finished studio still lifes

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

11.7

PERFORMANCE OBJECTIVE

P11.7 Given a working studio, a working darkroom/photo lab, and a still life arrangement, shoot, process, and present two finished studio still lifes. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E11.7.1 Define key terms and concepts related to studio photography (refer to E11.1.1).

E11.7.2 Demonstrate various methods of arranging still lifes and metering light.

E11.7.3 Process film and make prints.

E11.7.4 Demonstrate how to present finished still lifes.

E11.7.5 Critique photographic examples.

CRITERION-REFERENCED MEASURE

C11.7 Photograph, process, and present two finished studio still lifes. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review key terms and concepts related to studio photography (E11.7.1).
2. Have students analyze photographic examples of studio still lifes (E11.7.5).
3. Assign reading in text (E11.7.1-E11.7.5).
4. Demonstrate various methods used to arrange still life shots in a studio setting; review methods used to meter light (E11.7.2).
5. Review processing, printing, and finishing procedures and techniques (E11.7.3, E11.7.4).
6. Give students exercises in photographing studio still lifes in a variety of lighting situations (E11.7.2).
7. Have students process film, make and edit contact sheet, and make enlargements (E11.7.3).
8. Have students critique one another's work (E11.7.5).
9. Have students prepare photographs for submission or portfolios (E11.7.4).

SELECTED TOOLS AND MATERIALS

Working photo studio (See Appendix D, #6)
35mm or 120mm camera
35mm or 120mm film
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared guidelines on photographing studio still lifes

SELECTED AUDIOVISUAL MATERIALS

AV Program: Lighting. Instructional Media Associates, Inc.
Slide/Tape: Thinking Photographically. Media Loft, Inc.

SELECTED REFERENCES

Advertising Photography. Allyn Salomon.
Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 38. Joel A. Benedict.
How to Control and Use Photographic Lighting. David Brooks.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 245-265. Charles Swedlund.

Application

DUTY AREA

11. USING STUDIO LIGHTING

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

TASK/COMPETENCY

11.8 Create original lighting effects

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

11.8

PERFORMANCE OBJECTIVE

P11.8 Given a working studio and a subject, create three original lighting effects. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E11.8.1 Identify and define the following studio lighting terms: butterfly lighting, fill flash, hair light, Rembrandt effect, backdrop, seamless, tripod, view camera, boom, strobe unit, slave unit, flash unit, tungsten lights, quartz lights, extension cords, grounded plug, strip lights, reflectors, soft box, diffusion screen, barndoors, snoot, light stand, standard 18% neutral gray card, incident-light, reflected-light, and flash meters.

E11.8.2 List specific lighting techniques and identify the characteristics associated with each technique.

E11.8.3 Select subject and plan lighting for three different original lighting effects.

E11.8.4 Critique photographic examples of creative lighting effects.

E11.8.5 Prepare work for submission or portfolio.

CRITERION-REFERENCED MEASURE

C11.8 Create three original lighting effects with 100 percent accuracy according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review key terms and concepts related to studio lighting techniques (E11.8.1).
2. Demonstrate various studio lighting techniques and discuss their characteristics and effects (E11.8.2).
3. Assign reading in text (E11.8.1-E11.8.5).
4. Have students analyze photographic examples of original lighting effects (E11.8.4).
5. Give students exercises in creating several original lighting effects, using the same subject and setting (E11.8.3).
6. Have students process film, make and edit contact sheets, and make enlargements (E11.8.5).
7. Have students critique one another's work (E11.8.4).
8. Have students mount enlargements for portfolios (E11.8.5).

SELECTED TOOLS AND MATERIALS

Working photo studio (See Appendix D, #6)
35mm or 120mm camera
35mm or 120mm film
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared guidelines on original lighting effects

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Control and Command: Exposure as a Creative Force. Media Loft, Inc.
AV Program: Lighting. Instructional Media Associates, Inc.
Slide/Tape: Shedding Light on Light. Media Loft, Inc.
Slide/Tape: Thinking Photographically. Media Loft, Inc.

SELECTED REFERENCES

Advertising Photography. Allyn Salomon.
Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 38. Joel A. Benedict.
How to Control and Use Photographic Lighting. David Brooks.
Photography, 2nd ed., Chapter 9. Barbara Upton and John Upton.
Photography, 2nd ed., pp. 245-265. Charles Swedlund.

DUTY AREA

12. PHOTOGRAPHING SUBJECTS FOR COMMERCIAL PURPOSES

TASKS/COMPETENCIES

12.1 Define client's need and product image

12.2 Plan and execute a photograph for commercial purposes

12.3 Prepare finished photos for presentation

DUTY AREA

12. PHOTOGRAPHING SUBJECTS FOR COMMERCIAL PURPOSES

TASK/COMPETENCY

12.1 Define client's need and product image

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

12.1

PERFORMANCE OBJECTIVE

P12.1 Given a client with a product to promote, and the necessary forms and pricing information, define the client's need and the product image and prepare an estimate of photography costs for the client. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E12.1.1 Identify and define the following commercial photography terms: payment contract, American Society of Magazine Photographers (ASMP) rates, job estimates, client, art director, graphic design, layout, storyboard, and product image.

E12.1.2 Prepare storyboard or layout.

E12.1.3 Price and estimate cost of materials and labor.

E12.1.4 Estimate the types of materials needed to accomplish the job.

E12.1.5 Critique photographs designed and presented for advertising or promotional purposes.

CRITERION-REFERENCED MEASURE

C12.1 Define client's need and product image and prepare an estimate of photography costs for the client. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to commercial photography for advertising or promotional purposes (E12.1.1).

2. Have students discuss factors involved in identifying and defining a client's need or a product image; demonstrate how to prepare a storyboard and how to estimate material and labor costs (E12.1.2-E12.1.4).

3. Have students analyze photographic examples of product shots designed for advertising purposes (E12.1.5).

4. Give exercises in defining client's needs and product images and in preparing job estimates; have students role play client-product image situations (E12.1.2-E12.1.4).

5. Have students critique one another's work (E12.1.5).

SELECTED TOOLS AND MATERIALS

Examples of storyboards and layouts
Examples of product photographs taken for advertising purposes
Teacher-prepared guidelines for identifying client's need and product image

SELECTED AUDIOVISUAL MATERIALS

Film:	Cameras and Careers. Film Rental Center of Syracuse University.
Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Educational Dimensions Corp.
Slide/Tape:	Thinking Photographically. Media Loft, Inc.

SELECTED REFERENCES

Advertising Photography. Allyn Salomon.
American Photographer. American Photographer Magazine.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Camera Arts. Ziff-Davis Publishing Co.
Communication Arts Magazine. Communication Arts.
Petersen's Photographic. Petersen Publishing Co.

Application

DUTY AREA

12. PHOTOGRAPHING SUBJECTS FOR COMMERCIAL PURPOSES

TASK/COMPETENCY

12.2 Plan and execute a photograph for commercial purposes

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

12.2

PERFORMANCE OBJECTIVE

P12.2 Given a client's job order for a clearly defined product image to promote and the necessary props, supplies, and equipment, plan and execute a photograph to fulfill the client's needs. Performance must be 100 percent successful according to client specifications.

SELECTED ENABLING OBJECTIVES

E12.2.1 Identify and define key terms and concepts related to commercial studio photography (refer to E11.1.1 and E12.1.1).

E12.2.2 Identify characteristics of successful and unsuccessful advertisements.

E12.2.3 Identify client's need and define product image (refer to P12.1).

E12.2.4 Write simple storyboard.

E12.2.5 Gather the props needed to execute the photo.

E12.2.6 Practice various lighting arrangements.

E12.2.7 Critique photographs designed to promote specific product images.

CRITERION-REFERENCED MEASURE

C12.2 Plan and execute a photograph for commercial purposes to fulfill a client's needs and to promote a defined product image. Performance must be 100 percent successful according to client specifications.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review key terms and concepts related to commercial photography and advertising (E12.2.1).

2. Have students analyze an assortment of magazine and newspaper advertisements that feature product shots; discuss effective ways to project a desired product image; have students list and discuss characteristics of successful and unsuccessful advertisements (E12.2.1-E12.2.7).

3. Discuss factors to consider in planning and executing photographs for commercial advertising purposes; demonstrate planning and setting up procedures for several different kinds of products and product images (E12.2.3-E12.2.6).

4. Give exercises in planning and executing photographs designed to promote product images and to meet a client's advertising needs (E12.2.3-E12.2.6).

5. Have students critique one another's work (E12.2.7).

SELECTED TOOLS AND MATERIALS

Working photo studio (See Appendix D, #6)
35mm or 120mm camera
35mm or 120mm film

SELECTED AUDIOVISUAL MATERIALS

Film:	Cameras and Careers. Film Rental Center of Syracuse University.
Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Educational Dimensions Corp.
Slide/Tape:	Thinking Photographically. Media Loft, Inc.

SELECTED REFERENCES

Advertising Photography. Allyn Salomon.
American Photographer. American Photographer Magazine.
ASMP Guide to Professional Business Practices in Photography, Latest ed. Arie Kopelman, ed.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Camera Arts. Ziff-Davis Publishing Co.
Communication Arts Magazine. Communication Arts.
Petersen's Photographic. Petersen Publishing Co.
Photography: What's the Law? Robert M. Cavallo and Stuart Kahan.

DUTY AREA

12. PHOTOGRAPHING SUBJECTS FOR COMMERCIAL PURPOSES

TASK/COMPETENCY

12.3 Prepare finished photos for presentations

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

12.3

PERFORMANCE OBJECTIVE

P12.3 Given a client, job order specifications, a finished photograph, and the necessary supplies and equipment, prepare the photograph for presentation to the client. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E12.3.1 Identify and define the following terms: portfolio, dry-mount, mat, storyboard, retouch, etch, and invoice.

E12.3.2 Demonstrate and practice proper method of mounting or matting a slide or print for presentation.

E12.3.3 Assemble a professional portfolio for presentation to the client.

E12.3.4 Critique finished photographs.

CRITERION-REFERENCED MEASURE

C12.3 Prepare a finished photograph for presentation to the client. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms related to finishing, dry mounting and matting photographs (E12.3.1).

2. Have students practice mounting and matting slides or prints for portfolios (E12.3.2).

3. Display sample presentation portfolios (E12.3.3).

4. Have students mount and mat photographs and place in portfolios (E12.3.3).

5. Have students critique work (E12.3.4).

SELECTED TOOLS AND MATERIALS

Finished prints and/or slides
Print presentation and framing equipment (See Appendix D, #14)
Examples of professional portfolios
Teacher-prepared guidelines for preparing photos for presentation

SELECTED AUDIOVISUAL MATERIALS

Film:	Cameras and Careers. Film Rental Center of Syracuse University.
Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Educational Dimensions Corp.
Slide/Tape:	Thinking Photographically. Media Loft, Inc.

SELECTED REFERENCES

Advertising Photography. Allyn Salomon.
American Photographer. American Photographer Magazine.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Camera Arts. Ziff-Davis Publishing Co.
Communication Arts Magazine. Communication Arts.
Petersen's Photographic. Petersen Publishing Co.

DUTY AREA

13. USING SPECIAL MATERIALS AND TECHNIQUES

TASKS/COMPETENCIES

13.1 Identify characteristics of special silver and non-silver photosensitive materials

13.2 Produce prints, using special techniques

DUTY AREA

13. USING SPECIAL MATERIALS AND TECHNIQUES

TASK/COMPETENCY

13.1 Identify characteristics of special silver and non-silver photo-sensitive materials

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

13.1

PERFORMANCE OBJECTIVE

P13.1 Given print samples of special silver and non-silver photo-sensitive materials, identify the process used to produce each. Each print must be labeled according to light-sensitive chemicals used, tonal range, print color, contrast, permanence, and other characteristics determined by the instructor. Identifications and labels must be 90 percent correct.

SELECTED ENABLING OBJECTIVES

E13.1.1 Define the following terms related to special silver and non-silver photosensitive materials: Kodalith, high contrast film, copy negative, contact print, printing-out process, negative, positive, stencil, mask, translucent, opaque, emulsion, etching paper, lithography paper, rag content, sized paper, textured paper, cover stock, paper weight, pin registration, "solarization", Sabbatier effect, and split-toning.

E13.1.2 Identify and explain each of the special silver and non-silver photosensitive processes represented by given print samples and state the light-sensitive chemicals used for each process.

E13.1.3 Identify special films and match them with examples of their resulting prints.

CRITERION-REFERENCED MEASURE

C13.1 Identify the special silver or non-silver photo process used to produce each print within a group of selected print examples. Each print must be labeled according to light-sensitive chemicals used, tonal range, print color, contrast, permanence, and other characteristics determined by the instructor. Identifications and labels must be 90 percent correct.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Provide students with vocabulary sheets of terms related to special silver and non-silver photo-sensitive materials (E13.1.1).

2. Assign reading in text on special silver and non-silver materials and processes (E13.1.1-E13.1.3).

3. Display and discuss print examples of various special silver and non-silver processes and identify distinguishing characteristics of each (E13.1.1-E13.1.3).

4. Display and discuss the light-sensitive chemicals used with each photo-sensitive material (E13.1.1-E13.1.3).

5. Demonstrate how to read and interpret specifications for preparing light-sensitive chemicals (E13.1.1-E13.1.3).

SELECTED TOOLS AND MATERIALS

Print examples
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Brushes (4")
Silkscreen and accessories
Special film materials (Example: Kodalith)
Teacher-prepared chart on various silver and non-silver processes and the chemical formulas and characteristics of each

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Post-Visualization and The Multiple Image: The Vision of Jerry Uelsmann. Media Loft, Inc.
Teacher-prepared slide presentation on special silver and non-silver processes

SELECTED REFERENCES

Breaking the Rules, pp. 231-233. Bea Nettles.
Creative Darkroom Techniques, 12-1975, AG-18. Kodak.
Darkroom Photography. Darkroom Photography.
Handbook for Contemporary Photography, 4th ed. Arnold Gasson.
The Keepers of Light: A History and Working Guide to Early Photographic Processes. William Crawford.
Petersen's Photographic Library: Guide to Creative Darkroom Techniques. Petersen Publishing Co.
Photography, 2nd ed., Chapter 12. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 12. Charles Swedlund.

DUTY AREA

13. USING SPECIAL MATERIALS AND TECHNIQUES

TASK/COMPETENCY

13.2 Produce prints, using special techniques

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

13.2

PERFORMANCE OBJECTIVE

P13.2 Given the appropriate supplies and instruction in using special techniques to produce prints, produce at least one print, using one of the following techniques: a) high contrast image printing, b) multiple exposure printing using an enlarger, c) hand coloring a print, and d) processing and printing using black and white infrared film. Performance must be 90 percent correct according to instructor's written checklist.

SELECTED ENABLING OBJECTIVES

E13.2.1 Identify and define common terms used in special silver and non-silver processes (refer to 13.1.1).

E13.2.2 Outline procedure for producing prints, using the following special techniques: a) high contrast image printing, b) multiple exposure printing using an enlarger, c) hand coloring, d) black and white infrared film processing and printing, e) "solorization" processing (Sabbatier effect), f) split-toning, g) cyanotype processing, and h) Van Dyke Brown processing.

E13.2.3 Select appropriate special technique for a designated print.

E13.2.4 Identify, measure, and mix the proper chemicals for designated special printing technique.

E13.2.5 Demonstrate, in correct sequence, the steps in the selected process.

E13.2.6 Critique photographic examples of prints processed, using special materials and techniques.

E13.2.7 Prepare work for submission or portfolio.

CRITERION-REFERENCED MEASURE

C13.2 Produce at least one print, using one of the following special techniques: a) high contrast image printing, b) multiple exposure printing using an enlarger, c) hand coloring a print, and d) processing and printing using black and white infrared film. Performance must be 90 percent correct according to instructor's written checklist.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to the use of special materials and techniques (E13.2.1).
2. Assign reading in text (E13.2.1-E13.2.7).
3. Display a variety of prints produced, using special materials and techniques; have students analyze photographic examples and describe the special technique or material used to produce each print (E13.2.3-E13.2.6).
4. Give a series of demonstrations on the use of special materials and techniques (E13.2.2, E13.2.6).
5. Have students practice selecting and using special materials and processing techniques according to interests and availability of materials; require students to produce at least one print, using a special material or technique (E13.2.2-E13.2.6).
6. Have students prepare prints for inclusion in portfolios (E13.2.7).
7. Have students critique one another's work (E13.2.6).

SELECTED TOOLS AND MATERIALS

Print examples
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Brushes (4")
Silkscreen and accessories
Special film materials (Example: Kodalith)
Teacher-prepared chart on various silver and non-silver processes and chemical formulas and characteristics of each
Teacher-prepared checklist on special printing techniques

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: Photography and The Electronic Image. Media Loft, Inc.
Slide/Tape: Post-Visualization and The Multiple Image: The Vision of Jerry Uelsmann. Media Loft, Inc.

SELECTED REFERENCES

Breaking the Rules, pp. 231-233. Bea Nettles.
Creative Darkroom Techniques, 12-1975, AG-18. Kodak.
Darkroom Photography. Darkroom Photography.
Handbook for Contemporary Photography, 4th ed. Arnold Gasson.
The Keepers of Light: A History and Working Guide to Early Photographic Processes. William Crawford.
Petersen's Photographic Library: Guide to Creative Darkroom Techniques. Petersen Publishing Co.
Photography, 2nd ed., Chapter 12. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 12. Charles Swedlund.

DUTY AREA

14. MAKING PHOTOGRAPHIC COPIES

TASKS/COMPETENCIES

14.1 Make a copy of a visual piece

14.2 Duplicate slides

14.3 Make copy slides of a visual piece

DUTY AREA

14. MAKING PHOTOGRAPHIC COPIES

TASK/COMPETENCY

14.1 Make a copy print of a visual piece

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

14.1

PERFORMANCE OBJECTIVE

P14.1 Given a visual piece, the appropriate photographic supplies and equipment, and a working darkroom/photo lab, photograph, process, and print a black and white or color copy of the piece. Performance must be 90 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E14.1.1 Identify and define the following terms related to copywork: copystand, architectural grid, level, tungsten lights, strobe units, incident meter, standard 18% neutral gray card, and copy light tent.

E14.1.2 List the equipment necessary for copywork.

E14.1.3 Outline procedure for making a copy print of a visual piece.

E14.1.4 Critique photographic examples of copy prints.

E14.1.5 Process film and make prints.

E14.1.6 Prepare work for submission or portfolio.

CRITERION-REFERENCED MEASURE

C14.1 Photograph, process, and print a black and white or color copy of a visual piece. Performance must be 90 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to copywork (E14.1.1).
2. Explain uses and characteristics of copy prints (E14.1.1-E14.1.6).
3. Assign reading in text (E14.1.1-E14.1.6).
4. Have students analyze photographic examples of copywork (E14.1.4).
5. Explain and demonstrate procedures for making a copy print of several different visual pieces (E14.1.2, E14.1.3).
6. Give students exercises in making copy prints of visual pieces; have students critique work and analyze results of exercises (E14.1.2-E14.1.5).
7. Have students make enlargements of successful prints and include copy prints in portfolios (E14.1.5, E14.1.6).

SELECTED TOOLS AND MATERIALS

Copystand or flat wall
35mm single lens reflex camera
35mm black and white or color film
Incident-light or reflected-light meter
Sheet of glass (1/4" thick)
Cable release
Standard 18% neutral gray card
Black non-reflective material
2 tunsten lights or strobe units
Ruler
Teacher-prepared guidelines for producing copy prints

SELECTED AUDIOVISUAL MATERIALS

AV Program: Photographic Copying. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 39. Joel A. Benedict.
Photography, 2nd ed., pp. 261-265. Charles Swedlund.

Application

DUTY AREA

14. MAKING PHOTOGRAPHIC COPIES

TASK/COMPETENCY

14.2 Duplicate slides

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

14.2

PERFORMANCE OBJECTIVE

P14.2 Given a color transparency, the appropriate photographic supplies and equipment, and a working darkroom/photo lab, photograph, process, and mount a duplicate slide of the transparency. Performance must be 95 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E14.2.1 Identify and define the following terms related to photographic copywork: copystand, architectural grid, level, tungsten lights, strobe units, incident meter, standard 18% neutral gray card, copy light tent, and slide duplicator.

E14.2.2 List the equipment necessary for copywork.

E14.2.3 Outline procedure for duplicating slides, using copywork techniques.

E14.2.4 Critique quality of duplicated slides.

CRITERION-REFERENCED MEASURE

C14.2 Photograph, process, and mount a duplicate slide of a color transparency. Performance must be 95 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review key terms and concepts related to copywork (E14.2.1).
2. Display equipment needed to duplicate slides, using copywork techniques (E14.2.2).
3. Assign reading in text (E14.2.1-E14.2.4).
4. Demonstrate how to duplicate color transparencies (E14.2.3).
5. Give exercises in photographing, processing, and mounting duplicate slides; have students critique one another's work (E14.2.2-E14.2.4).

SELECTED TOOLS AND MATERIALS

Copystand or flat wall
35mm single lens reflex camera
35mm black and white or color film
Incident-light or reflected-light meter
Sheet of glass (1/4" thick)
Cable release
Standard 18% neutral gray card
Black non-reflective material
2 tungsten lights or strobe units
Ruler
Slide duplicator or extension bellows
Small flash unit
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Teacher-prepared guidelines for duplicating slides

SELECTED AUDIOVISUAL MATERIALS

AV Program: Copying Slides. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 40. Joel A. Benedict.
Photography, 2nd ed., pp. 261-265. Charles Swedlund.

DUTY AREA

14. MAKING PHOTOGRAPHIC COPIES

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

TASK/COMPETENCY

14.3 Make copy slides of a visual piece

COURSE

Commercial Photography II (8608)

14.3

PERFORMANCE OBJECTIVE

P14.3 Given a visual piece, the appropriate photographic supplies and equipment, and a working darkroom/photo lab, photograph, process, and mount a copy slide of the visual piece. Performance must be 95 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E14.3.1 Review the following terms and concepts related to photographic copywork: copystand, architectural grid, level, tungsten lights, strobe units, incident-light meter, standard 18% neutral gray card, copy light tent, and slide duplicator.

E14.3.2 List the equipment necessary for copywork and for production of copy slides from a visual piece.

E14.3.3 Outline a procedure for making copy slides of a visual piece.

E14.3.4 Critique designated copy slides.

CRITERION-REFERENCED MEASURE

C14.3 Photograph, process, and mount a copy slide of a visual piece. Performance must be 95 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review key terms and concepts related to making photographic copies (E14.3.1).
2. Demonstrate how to photograph, process, and mount a copy slide of a visual piece (E14.3.2, E14.3.3).
3. Give students practice exercises in making copy slides of visual pieces (E14.3.3).
4. Have students critique one another's work (E14.3.4).

SELECTED TOOLS AND MATERIALS

Copystand or flat wall
35mm single lens reflex camera
35mm black and white or color film
Incident-light or reflected-light meter
Sheet of glass (1/4" thick)
Cable release
Standard 18% neutral gray card
Black non-reflective material
2 tungsten lights or strobe units
Ruler
Slide duplicator or extension bellows
Small flash unit
Working darkroom/photofinishing lab
(See Appendix D, #11-14)
Teacher-prepared guidelines for making
copy slides of a visual piece

SELECTED AUDIOVISUAL MATERIALS

AV Program: Copying Slides. Instructional Media Associates, Inc.
AV Program: Photographic Copying. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 40. Joel A. Benedict.
Photography, 2nd ed., pp. 261-265. Charles Swedlund.

DUTY AREA

15. DEVELOPING CRITICAL SKILLS

TASKS/COMPETENCIES

15.1 Identify the use of visual language (elements and principles of design and composition)

15.2 Identify past and present uses, methods, styles, movements, and directions in photography

15.3 Investigate works of famous photojournalists and artists

15.4 Critique photographic work in terms of technique, content, and aesthetics

15.5 Review and critique a photographic art show, exhibit, or display

15.6 Identify common camerawork errors

15.7 Identify common processing errors

Application

DUTY AREA

15. DEVELOPING CRITICAL SKILLS

TASK/COMPETENCY

15.1 Identify the use of visual language (elements and principles of design and composition)

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

15.1

PERFORMANCE OBJECTIVE

P15.1 Given a selection of photographs, identify the use of visual language (elements and principles of design and composition). Performance must be at least 80 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E15.1.1 Identify and define the following key terms and concepts related to the elements and principles of design and the use of visual language: visual design, visual language, series, light quality, texture, tone, color, pattern, line, shape, composition, space, angle, framing, contrast, balance, symmetry, and asymmetry.

E15.1.2 Evaluate the effects of various design elements and principles on the viewer.

E15.1.3 Identify the elements and principles of design and describe the use of visual language in photographic examples.

CRITERION-REFERENCED MEASURE

C15.1 Identify the use of visual language (elements and principles of design and composition) in selected photographs. Performance must be at least 80 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to visual language and the elements and principles of design (E15.1.1).

2. Display photographic examples and describe how visual language is used in each (E15.1.2, E15.1.3).

3. Have students practice identifying the elements and principles of design and use of visual language in photographic examples (E15.1.2, E15.1.3).

4. Assign reading in text (E15.1.1-E15.1.3).

5. Have students collect, display, and discuss photographic examples which illustrate various design elements or principles and uses of visual language (E15.1.1-E15.1.3).

6. Have students write a one page analysis of the visual language expressed in a photograph of their choice (E15.1.1-E15.1.3).

SELECTED TOOLS AND MATERIALS

Slide projector
Cassette recorder
Teacher-prepared guidelines on identification of use of visual language

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	Control and Command: Exposure as a Creative Force. Media Loft, Inc.
Slide/Tape:	Expanding Photographic Vision: The Sight and Insight of Ernst Haas, Part II. Media Loft, Inc.
Film:	Images of Man, I: Cornell Capa. Scholastic Magazines, Inc.
Film:	Images of Man, I: Bruce Davidson. Scholastic Magazines, Inc.
Film:	Images of Man, I: Don McCullin. Scholastic Magazines, Inc.
Film:	Images of Man, I: W. Eugene Smith. Scholastic Magazines, Inc.
Film:	Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film:	Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film:	Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.
Film:	Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Sound/Slide:	Learning to See and Understand: Developing Visual Literacy. The Center for Humanities, Inc.
Sound/Slide:	A Picture's Worth a Thousand Words: Interpreting Visual Information. The Center for Humanities, Inc.
Slide/Tape:	Shedding Light on Light. Media Loft, Inc.
Slide/Tape:	Thinking Photographically. Media Loft, Inc.
Slide/Tape:	To Dream With Open Eyes. Media Loft, Inc.
Slide/Tape:	To Explore and Express. Media Loft, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 28. Joel A. Benedict.
Lens and Shutter, Part 2, Chapters 3 and 4. Harvey Weiss.
Photo Explorations, AT-16AA. Kodak.
Photography, 2nd ed., Chapters 1, 9, 14, and 16, pp. 338-335. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 1 and 14. Charles Swedlund.
Reading Photographs: Understanding the Aesthetics of Photography. Jonathan Bayer.

Application

DUTY AREA

15. DEVELOPING CRITICAL SKILLS

TASK/COMPETENCY

15.2 Identify past and present uses, methods, styles, movements, and directions in photography

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

15.2

PERFORMANCE OBJECTIVE

P15.2 Given the necessary instruction, resources on the uses, art, and history of photography, and a selection of slides, identify the past and present photographic uses, methods, styles, movements, or directions that are illustrated in each slide. Performance must be at least 70 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E15.2.1 Describe applications of photography and define the following key terms and concepts related to methods, styles, movements, and direction in the field of photography: commercial, scientific, industrial, medical documentary, journalistic, personal record, and artistic uses; wet plate, gelatin emulsion/roll-film, and current experimental non-silver methodologies; straight vs. experimental and direct vs. manipulative approaches; journalistic/documentary, pictoralist, realist, surrealist, abstract, and individual styles and methods; studio vs. field (location) photography; and descriptions and characteristics of past and contemporary artistic eras or movements in photography.

E15.2.2 Demonstrate a basic understanding of visual language.

E15.2.3 Demonstrate a basic understanding of 35mm camera operation and darkroom procedures.

CRITERION-REFERENCED MEASURE

C15.2 Identify the past and present photographic uses, methods, styles, movements, or directions illustrated in a selection of slides. Performance must be at least 70 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to the applications, art, and history of photography; assign appropriate reading in text and show background films on visual language, photographic trends and tradition, and the history of photographic art and technology (E15.2.1-E15.2.3).

2. Display photographic examples to illustrate past styles, uses, movements, and methods, or present trends and directions in the field of photography (E15.2.1-E15.2.3).

3. Relate current camera and darkroom technology to major past technological discoveries and developments in the field of photography; discuss anticipated future technological development (E15.2.3).

4. Have students practice identifying specific trends, movements, technologies, methods, styles, and applications in the field of photography, using slides, other photographic examples, or textbooks (E15.2.1-E15.2.3).

5. Quiz students on key concepts, terms, and facts related to the art, history, and applications of photography; show slides illustrating uses, methods, styles, movements, directions, and technological advances in photography and have students make identifications, using a multiple choice answer sheet (E15.2.1-E15.2.3).

SELECTED TOOLS AND MATERIALS

Teacher-prepared guidelines for identification of past and present uses, methods, styles, movements, and directions in photography

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	Before LIFE, The Camera Was a Man: Early European Photojournalism and its American Influence. Media Loft, Inc.
Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Geftner. Media Loft, Inc.
Film:	Images of Man, I: Cornell Capa. Scholastic Magazines, Inc.
Film:	Images of Man, I: Bruce Davidson. Scholastic Magazines, Inc.
Film:	Images of Man, I: Don McCullin. Scholastic Magazines, Inc.
Film:	Images of Man, I: W. Eugene Smith. Scholastic Magazines, Inc.
Film:	Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film:	Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film:	Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.
Film:	Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Film:	Language of the Camera Eye. Pennslyvania State University Audiovisual Servicenter.
Slide/Tape:	Moments Within Us: Exploring the Photographic Essay. Media Loft, Inc.
Film:	The Naked Eye. Film Rental Center of Syracuse University.
Slide/Tape:	Point of Departure: Developing a Creative Approach to Photography and its Publication. Media Loft, Inc.
Slide/Tape:	Rich Clarkson! Anatomy of a Photo Director. Media Loft, Inc.
Film:	Time Machine. Film Rental Center of Syracuse University.
Slide/Tape:	Time, Place, and Subject: Responding to the Moment. Media Loft, Inc.
Slide/Tape:	To Explore and Express. Media Loft, Inc.

SELECTED REFERENCES

History of Photography from 1839 to the Present. Beaumont Newhall.
Photography, 2nd ed., Chapters 1 and 14-16. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 1 and 14. Charles Swedlund.

DUTY AREA

15. DEVELOPING CRITICAL SKILLS

TASK/COMPETENCY

15.3 Investigate works of famous photojournalists and artists

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

15.3

PERFORMANCE OBJECTIVE

P15.3 Given the appropriate reference materials, investigate works of famous photojournalists and artists by completing a two page written report, including photographic examples, on a famous photojournalist or photographic artist. Performance must be 70 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

F15.3.1 Identify and describe past and present uses, methods, styles, movements, and directions in the field of photography (Refer to P15.2).

E15.3.2 List representative famous past and present photojournalists and photographic artists and give a brief description of their works.

E15.3.3 Demonstrate a basic understanding of visual language.

E15.3.4 Demonstrate a basic understanding of 35mm camera operation and darkroom procedures.

E15.3.5 Select a famous photojournalist or photographic artist and research his or her life and works.

E15.3.6 Collect and analyze illustrations of photographic works by famous photojournalists or photographic artists.

CRITERION-REFERENCED MEASURE

C15.3 Complete a two page written report, including photographic examples, on a famous photojournalist or photographic artist. Performance must be 70 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students review key terms, concepts, and facts related to the art, applications, and history of photography (E15.3.1).
2. Provide students with a list of famous photojournalists and photographic artists; give a brief description of each artist's accomplishments and works (E15.3.2).
3. Provide students with a variety of classroom research resources or access to school or other library resources (E15.3.5).
4. Have each student research and report on one famous photojournalist or photographic artist. The written report should include the following topics and sections: a) biographical and historical data, b) technical data, c) a minimum of three examples of works by the artist, d) a full critique of a selected work, including thematic content, visual content, style, method, and intent, and e) a personal reaction to the artist and work (E15.3.5, E15.3.6).
5. Have students give an oral report to the class and share their personal reactions to the artist's work (E15.3.5, E15.3.6).
6. Optional: Have students produce a photograph in the same genre as the photographer of their choice (E15.3.1-E15.3.6).

SELECTED TOOLS AND MATERIALS

Teacher-prepared guidelines on writing a report on a photographic artist or photojournalist

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Slide/Tape: Expanding Photographic Vision: The Sight and Insight of Ernst Haas, Part II. Media Loft, Inc.
Film: Images of Man, I: Cornell Capa. Scholastic Magazines, Inc.
Film: Images of Man, I: Bruce Davidson. Scholastic Magazines, Inc.
Film: Images of Man, I: Don McCullin. Scholastic Magazines, Inc.
Film: Images of Man, I: W. Eugene Smith. Scholastic Magazines, Inc.
Film: Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film: Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film: Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.
Film: Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Slide/Tape: Inroads and Outroads: How Donald McCullin Photographs Combat and the Struggle to Survive. Media Loft, Inc.
Slide/Tape: Point of Departure: Developing a Creative Approach to Photography and its Publication. Media Loft, Inc.
Slide/Tape: Thinking Photographically. Media Loft, Inc.
Slide/Tape: Time, Place, and Subject: Responding to the Moment. Media Loft, Inc.
Slide/Tape: To Explore and Express. Media Loft, Inc.
Slide/Tape: The Weston Eye: Composition, Detail, and the Large Format Image. Media Loft, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapters 1 and 14-16. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 1 and 14. Charles Swedlund.

DUTY AREA

15. DEVELOPING CRITICAL SKILLS

TASK / COMPETENCY

15.4 Critique photographic work in terms of technique, content, and aesthetics

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

15.4

PERFORMANCE OBJECTIVE

P15.4 Given a selection of photographs and a set of criteria, critique, orally or in writing, each photographic work, evaluating for technique, content, and aesthetics. Performance must be 70 percent correct according to instructor's written checklist.

SELECTED ENABLING OBJECTIVES

E15.4.1 Define the following key terms and concepts related to the critical evaluation of photographic works: photographic technique, darkroom technique, content, subject, theme, mood, expression, message, setting, involvement, symbolism, suggestion, style, direction, aesthetics, visual language, and design elements and principles.

E15.4.2 Demonstrate a basic understanding of 35mm camera operation and darkroom procedures.

E15.4.3 Demonstrate a basic understanding of visual language.

E15.4.4 Demonstrate ability to describe the content, intent, style, mood, and message of photographic works.

CRITERION-REFERENCED MEASURE

C15.4 Critique, orally or in writing, a selection of photographs, evaluating each for technique, content, and aesthetics. Performance must be 70 percent correct according to instructor's written checklist.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to the critical evaluation of photographic works (E15.4.1).
2. Demonstrate how to evaluate photographic works for technique, content, aesthetics, and intent; have students practice evaluating photographs, using critical analysis skills (E15.4.1-E15.4.4).
3. Have students critique their own work (E15.4.4).
4. Have students critique, orally or in writing, their classmates' work (E15.4.4).
5. Assign reading and view films on critical analysis skills and principles (E15.4.1-E15.4.4).

SELECTED TOOLS AND MATERIALS

Examples of photographic works produced by photographers, both famous and unknown (including students' work)

Teacher-prepared checklist for evaluating photographic works

SELECTED AUDIOVISUAL MATERIALS

Film:	Images of Man, I: Cornell Capa. Scholastic Magazines, Inc.
Film:	Images of Man, I: Bruce Davidson. Scholastic Magazines, Inc.
Film:	Images of Man, I: Don McCullin. Scholastic Magazines, Inc.
Film:	Images of Man, I: W. Eugene Smith. Scholastic Magazines, Inc.
Film:	Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film:	Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film:	Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.
Film:	Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Sound/Slide:	Learning to See and Understand: Developing Visual Literacy. The Center for Humanities, Inc.
Sound/Slide:	A Picture's Worth a Thousand Words: Interpreting Visual Information. The Center for Humanities, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapters 1, 14, and 16, pp. 1-6. Barbara Upton and John Upton.

Photography, 2nd ed. Charles Swedlund.

DUTY AREA

15. DEVELOPING CRITICAL SKILLS

TASK / COMPETENCY

15.5 Review and critique a photographic art show, exhibit, or display

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

15.5

PERFORMANCE OBJECTIVE

P15.5 Given a set of criteria and the opportunity to visit an appropriate gallery or exhibition, review and critique a photographic art show, exhibit, or display. Performance must be at least 70 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E15.5.1 Define the following key terms and concepts related to the critical evaluation of photographic works: photographic technique, darkroom technique, content, subject, theme, mood, expression, message, setting, involvement, symbolism, suggestion, style, direction, aesthetics, visual language, and design elements and principles.

E15.5.2 Demonstrate a basic understanding of 35mm camera techniques and darkroom procedures.

E15.5.3 Demonstrate a basic understanding of visual language.

E15.5.4 Demonstrate ability to describe the content, intent, style, mood, and message of photographic works.

E15.5.5 Identify various types, styles, and purposes of photographic exhibitions and galleries.

CRITERION-REFERENCED MEASURE

C15.5 Review and critique a photographic art show, exhibit, or display. Performance must be at least 70 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to the critical evaluation of photographic works (E15.5.1).
2. Demonstrate how to evaluate photographic works in terms of technique, content, aesthetics, and intent; have students practice evaluating photographs, using critical analysis skills (E15.5.1-E15.5.5).
3. Have students critique their own work (E15.5.4).
4. Have students critique, orally or in writing, their classmates' work (E15.5.4).
5. Assign reading and view films on critical analysis skills and principles (E15.5.1-E15.5.5).
6. Discuss types, styles, and purposes of photographic art shows and galleries (E15.5.5).
7. Visit a gallery or exhibition and have students critique a portion of the show (E15.5.1-E15.5.5).

SELECTED TOOLS AND MATERIALS

Examples of photographic works produced by photographers, both famous and unknown (including students' work)

Teacher-prepared guidelines for evaluating a photographic exhibit

SELECTED AUDIOVISUAL MATERIALS

Film:	Images of Man, I: Cornell Capa. Scholastic Magazines, Inc.
Film:	Images of Man, I: Bruce Davidson. Scholastic Magazines, Inc.
Film:	Images of Man, I: Don McCullin. Scholastic Magazines, Inc.
Film:	Images of Man, I: W. Eugene Smith. Scholastic Magazines, Inc.
Film:	Images of Man, II: William Alber Allard. Scholastic Magazines, Inc.
Film:	Images of Man, II: Henri Cartier-Bresson. Scholastic Magazines, Inc.
Film:	Images of Man, II: Brian Lanker. Scholastic Magazines, Inc.
Film:	Images of Man, II: Eliot Porter. Scholastic Magazines, Inc.
Sound/Slide:	Learning to See and Understand: Developing Visual Literacy. The Center for Humanities, Inc.
Sound/Slide:	A Picture's Worth a Thousand Words: Interpreting Visual Literacy. The Center for Humanities, Inc.
Video/Film:	The Photographers. Time-Life Multimedia.

SELECTED REFERENCES

Photography, 2nd ed., Chapters 1, 14, and 16, pp. 1-6. Barbara Upton and John Upton.

Photography, 2nd ed., Chapter 14. Charles Swedlund.

Application

DUTY AREA

15. DEVELOPING CRITICAL SKILLS

PROGRAM

COMMERCIAL PHOTOGRAPHY
OCCUPATIONS (48.0204)

TASK/COMPETENCY

15.6 Identify common camerawork errors

COURSE

Commercial Photography I (8607)

15.6

PERFORMANCE OBJECTIVE

P15.6 Given a selection of negatives and prints, identify common camerawork errors. The identifications must be 80 percent accurate according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E15.6.1 Define common camerawork errors, including errors in: exposure, focusing, framing, lighting, composition, shutter speed selection, aperture selection, lens selection, and use of accessories.

E15.6.2 Analyze prints and identify errors.

E15.6.3 Analyze negatives and identify errors.

E15.6.4 Critique one's own work, using instructor's written guidelines.

CRITERION-REFERENCED MEASURE

C15.6 Identify common camerawork errors in a selection of negatives and prints. Identifications must be 80 percent accurate according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key camerawork errors (E15.6.1).
2. Have students identify errors in a selection of negatives and prints (E15.6.2).
3. Have students take a quiz on reading negatives to practice analyzing negatives for exposure errors (E15.6.3).
4. Have students critique their own work (E15.6.4).

SELECTED TOOLS AND MATERIALS

Photographs illustrating common camerawork errors
Negatives illustrating variations in composition and exposure
Teacher-prepared guidelines on identification of camerawork errors

SELECTED AUDIOVISUAL MATERIALS

AV Program: Basic Picture-Taking Techniques (#649). The Center for Humanities, Inc.
AV Program: The Beginnings of Photographic Composition (#651). The Center for Humanities, Inc.
AV Program: Composition. Instructional Media Associates, Inc.
AV Program: Exposure. Instructional Media Associates, Inc.
AV Program: Lighting. Instructional Media Associates, Inc.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 5, 6, 13, and 29-35. Joel A. Benedict.

Application

DUTY AREA

15. DEVELOPING CRITICAL SKILLS

TASK/COMPETENCY

15.7 Identify common processing errors

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)

15.7

PERFORMANCE OBJECTIVE

P15.7 Given a selection of negatives and prints, identify common processing errors. The identifications must be 80 percent accurate according to the instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E15.7.1 Define the following common negative and print defects: underexposure, overexposure, staining, incorrect processing procedures, chemical contamination, and fogging.

E15.7.2 Analyze negatives and prints and identify errors.

E15.7.3 Critique one's own work, using instructor's written guidelines.

CRITERION-REFERENCED MEASURE

C15.7 Identify common processing errors in a selection of negatives and prints. Identifications must be 80 percent accurate according to the instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss common film processing errors (E15.7.1).
2. Have students study examples of film processing errors (E15.7.2).
3. Have students define and discuss common print processing errors (E15.7.1).
4. Have students study examples of print processing errors (E15.7.2).
5. Have students analyze a set of negatives and prints for errors (E15.7.2).
6. Have students critique their own work (E15.7.3).

SELECTED TOOLS AND MATERIALS

Negatives illustrating common processing errors
Photographs illustrating common processing errors
Teacher-prepared practice and final "practical" quizzes
Teacher-prepared guidelines on identification of processing errors

SELECTED AUDIOVISUAL MATERIALS

AV Program:	Darkroom Tools and Techniques. Instructional Media Associates, Inc.
Filmstrip/Cassette:	Developing Black and White Film. Greystone Films, Inc.
AV Program:	Developing Black and White Roll Film. Instructional Media Associates, Inc.
Sound/Slide:	Effective Darkroom Technique. The Center for Humanities, Inc.
AV Program:	Enlarging. Instructional Media Associates, Inc.
Filmstrip/Cassette:	Printing Black and White. Greystone Films, Inc.

SELECTED REFERENCES

Photography, 2nd ed., Chapters 6 and 7. Barbara Upton and John Upton.
Photography, 2nd ed., Chapters 6 and 8. Charles Swedlund.

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

TASKS/COMPETENCIES

16.1	Maintain appropriate records and files
16.2	Develop and maintain portfolio
16.3	Prepare a slide portfolio
16.4	Assist in advertising campaign
16.5	Submit work to an outside lab
16.6	Set fees and prepare estimates
16.7	Bill client
16.8	Prepare work for customer pick-up or delivery
16.9	Submit photographic work for publication
16.10	Submit work to the free-lance photographic marketplace
16.11	Exhibit work
16.12	Prepare necessary documents for marketing, publishing, and exhibiting work

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

TASK/COMPETENCY

16.1 Maintain appropriate records and files

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

16.1

PERFORMANCE OBJECTIVE

P16.1 Given the necessary forms, equipment, and supplies and a specific photographic assignment, maintain appropriate records and files. Performance must be 80 percent correct according to instructor's written checklist.

SELECTED ENABLING OBJECTIVES

E16.1.1 Define and explain the following key terms and concepts related to photographic recordkeeping and filing: personal photographic filing system, job file, exposure data, processing data, proofs, client, credits, photo ID, model releases, tear sheets, and reference materials.

E16.1.2 List significant shooting data for self reference to be recorded while on assignment.

E16.1.3 List significant photo lab data for self reference to be recorded during production.

E16.1.4 List data required by client.

E16.1.5 List data required by outside professional processing or finishing lab.

E16.1.6 Make entries in shooting/processing record form.

E16.1.7 Make entries in a job file.

E16.1.8 Develop a coordinated personal filing system for negatives, contact sheets, proofs, shooting and processing data, and other records.

CRITERION-REFERENCED MEASURE

C16.1 Maintain appropriate records and files for a designated photographic assignment. Performance must be 80 percent correct according to instructor's written checklist.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to the maintenance of appropriate records and files of photographic work (E16.1.1).
2. Have students practice listing data required for self-reference, a typical client, and a typical outside lab (E16.1.2-E16.1.5).
3. Give students sample record forms (E16.1.7).
4. Have students regularly record their shooting and lab work data on teacher-prepared or self-developed record forms (E16.1.6, E16.1.7).
5. Have students regularly update their negative, contact sheet, and proof files and coordinate these with their written records (E16.1.8).
6. Have students make entries in class job file (E16.1.8).
7. Assign reading in text (E16.1.1-E16.1.8).
8. Have students regularly submit their personal photographic files for evaluation (E16.1.1-E16.1.8).

SELECTED TOOLS AND MATERIALS

Sample photographic files and forms
Hard-cover three ring notebooks for filing work
Negative files or sleeves
Teacher-prepared checklist on maintaining records and files

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Educational Dimensions Corp.

SELECTED REFERENCES

ASMP Guide to Professional Business Practices in Photography, Latest ed. Arie Kopelman, ed.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Photographic Dealers and Studios. Small Business Administration.
Photography and the Law, 5th ed. George Chernoff.
Photography: What's the Law? Robert M. Cavallo and Stuart Kahan.
Where and How to Sell Your Photographs, Latest ed. Arvel Ahlers, ed.

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

TASK/COMPETENCY

16.2 Develop and maintain portfolio

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

16.2

PERFORMANCE OBJECTIVE

P16.2 Given a selection of photographs and the necessary supplies, equipment, and specifications, develop and maintain a portfolio. Performance must be 80 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.2.1 Define and explain the following key terms and concepts: portfolio, portfolio folder, slide portfolio, mounted, matted, overmat, identification, title, untitled, subject, technical data, medium, interleaving, archival storage, shipping case, body of work, clip file, and tear sheets.

E16.2.2 List uses for a portfolio.

E16.2.3 Mount and overmat photographs.

E16.2.4 Store work in an appropriately clean and dry environment.

E16.2.5 Categorize work according to general type, format, medium, and intent (Examples: journalistic, experimental, studio).

E16.2.6 Label work by subject or title, date, name, and, if necessary, specific medium and technical data.

E16.2.7 Obtain an appropriate portfolio envelope, folder, or box.

E16.2.8 Evaluate own work and select best pieces by categories.

E16.2.9 Include best tear sheets in portfolio.

CRITERION-REFERENCED MEASURE

C16.2 Develop and maintain a photographic portfolio. Performance must be 80 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to portfolio development (E16.2.1).
2. Show students examples of portfolios that differ in format and intent (E16.2.1-E16.2.9).
3. Provide students with temporary portfolio envelopes (E16.2.7).
4. Provide students with necessary mounting and matting materials and equipment or direct them to the appropriate sources (E16.2.3, E16.2.4).
5. Give students assignment to develop a portfolio and maintain it throughout the course (E16.2.1-E16.2.9).
6. Check students' portfolios regularly for content, organization, presentation, and evidence of growth (E16.2.1-E16.2.9).
7. Invite professional photographers to visit the class and present their portfolios for the students to review (E16.2.1-E16.2.9).

SELECTED TOOLS AND MATERIALS

Red rope fiber portfolio envelopes, enough for one per student
Examples of professional portfolios (various formats and types)
Samples of mounted or overmatted work
Teacher-prepared guidelines for developing and maintaining a portfolio

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Educational Dimensions Corp.
AV Program:	Finishing and Mounting Prints. Instructional Media Associates, Inc.
Film:	Time Machine. Film Rental Center of Syracuse University.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapter 12. Joel A. Benedict.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Careers in the Visual Arts. School of Visual Arts.
Photography, 2nd ed., Chapter 8. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 8. Charles Swedlund
Where and How to Sell Your Photographs, Latest ed. Arvel Ahlers, ed.

Application

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

TASK / COMPETENCY

16.3 Prepare a slide portfolio

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

16.3

PERFORMANCE OBJECTIVE

P16.3 Given a selection of copy slides of visual pieces, a selection of original slides, and the necessary supplies, equipment, and specifications, prepare a slide portfolio. Performance must be 80 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.3.1 Define and explain the following key terms and concepts related to preparing a slide portfolio: slide portfolio, copy slides, original slides, duplicates, identification, subject, title, technical data, medium, body of work, and slide file.

E16.3.2 List uses for a portfolio and advantages of a slide portfolio.

E16.3.3 Make copy slides of original photographs.

E16.3.4 Store slides in slide files and maintain files in clean dry environment.

E16.3.5 Categorize work according to general type, format, medium, and intent.

E16.3.6 Label work by subject or title, date, name, and, if necessary, specific medium and technical data.

E16.3.7 Obtain an appropriate portfolio envelope, folder, or box.

E16.3.8 Evaluate own work and select best pieces by categories.

CRITERION-REFERENCED MEASURE

C16.3 Prepare and maintain a portfolio of original and copy slides. Performance must be 80 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to the preparation of a slide portfolio (E16.3.1).
2. Show students examples of slide portfolios (E16.3.4-E16.3.7).
3. Discuss the advantages and disadvantages of a print portfolio and a slide portfolio (E16.3.2).
4. Review procedures for making copy slides (E16.3.3).
5. Distribute samples of slide files and identify a source for obtaining the files (E16.3.4-E16.3.7).
6. Have students complete the first slide-file page of a slide portfolio (20 slides, including a minimum of 10 copy slides of visual pieces) (E16.3.4-E16.3.6).
7. Have students include completed slide-file pages in their personal photographic files (E16.3.1-E16.3.8).
8. Have students evaluate their completed slide portfolio (E16.3.8).

SELECTED TOOLS AND MATERIALS

Slide files
Sample slide portfolio, including copy slides and original slides
Slide projector and screen
Samples of mounted student slides, both copy slides of printed pieces and original slides
Teacher-prepared guidelines for developing and maintaining a slide portfolio

SELECTED AUDIOVISUAL MATERIALS

Film:	Cameras and Careers. Film Rental Center of Syracuse University.
Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
AV Program:	Copying Slides. Instructional Media Associates, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Educational Dimensions Corp.

SELECTED REFERENCES

Basic Photography: Camera Techniques and Darkroom Procedures Manual, Chapters 39 and 40. Joel A. Benedict.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Careers in the Visual Arts. School of Visual Arts.
Photography, 2nd ed., pp. 261-265. Charles Swedlund.
Where and How to Sell Your Photographs, Latest ed. Arvel Ahlers, ed.

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

TASK/COMPETENCY

16.4 Assist in advertising campaign

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

16.4

PERFORMANCE OBJECTIVE

P16.4 Given a club or class sponsored advertising project involving actual clients, the necessary photographic equipment and supplies, and a working darkroom/photo lab, assist in the advertising campaign. Performance must be 70 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.4.1 Define and explain the following key terms and concepts related to photographic advertising services: client, advertising campaign, promotional techniques, logo, poster, samples, display, products, services, fees, scheduling, studio portrait, portrait, presentation folder, polaroid, and photo buttons.

E16.4.2 Identify and discuss advertising and promotional techniques.

E16.4.3 List and discuss possible project ideas.

E16.4.4 Select project.

E16.4.5 Plan and organize project.

E16.4.6 Participate in project.

E16.4.7 Evaluate results of project.

CRITERION-REFERENCED MEASURE

C16.4 Assist in a class or club sponsored advertising campaign. Performance must be 70 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to photographic advertising services and products (E16.4.1).
2. Show examples of successful and unsuccessful project and advertising ideas (E16.4.3).
3. Have students select a project that is feasible and appealing to client from a list of suggestions (Examples: photo buttons, photo posters, regular and instant studio portraits, toned studio portraits, and old-fashioned studio portraits) (E16.4.4).
4. Have students discuss advertising and promotional techniques (E16.4.2).
5. Assist students in promoting and running the project (E16.4.5, E16.4.6).
6. Have students evaluate the results of the project (E16.4.7).

SELECTED TOOLS AND MATERIALS

4" x 5" view camera and accessories
35mm single lens reflex camera and accessories
35mm, 4" x 5", and Polaroid films
Polaroid back
Working photo studio (See Appendix D, #6)
Working darkroom/photofinishing lab (See Appendix D, #11-14)
Portrait presentation folders
Toning supplies as needed
Button-making equipment
Teacher-prepared guidelines for photographic advertising campaigns

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Slide/Tape: Thinking Photographically. Media Loft, Inc.

SELECTED REFERENCES

American Photographer. American Photographer Magazine.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Camera Arts. Ziff-Davis Publishing Co.
Petersen's Photographic. Petersen Publishing Co.
Where and How to Sell Your Photographs, Latest ed. Arvel Ahlers, ed.

— Application —

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

TASK / COMPETENCY

16.5 Submit work to an outside lab

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography II (8608)

16.5

PERFORMANCE OBJECTIVE

P16.5 Given a photographic product ready for processing and the necessary forms, mailers, supplies, and specifications, submit film or photographic work to an outside professional processing or photofinishing lab. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.5.1 Define and explain the following key terms and concepts related to submitting work to an outside lab: professional processing lab, photofinishing service, prepaid processing mailer, slides vs. prints, mounted vs. unmounted, and special processing instructions.

E16.5.2 Fill out a prepaid mailer and send film out for processing.

E16.5.3 List several local professional labs and photofinishing facilities.

E16.5.4 List technical data required by an outside lab (Examples: type of film, number of exposures, service or format desired, and special processing instructions).

E16.5.5 List common services performed by local and out-of-town professional photo labs.

CRITERION-REFERENCED MEASURE

C16.5 Submit photographic work to an outside professional processing or photofinishing lab. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to submitting work to an outside professional lab or photofinishing facility (E16.5.1).
2. Discuss the advantages and disadvantages of a professional lab versus a mass market photofinishing facility and of delivering the material versus using a mailer (E16.5.1).
3. Show students samples of work done by various photofinishing labs and plants (E16.5.1-E16.5.5).
4. Have students locate listings of labs and plants in popular photographic periodicals and the phone book's yellow pages (E16.5.3).
5. Discuss the range of services performed by local and out-of-town professional photo labs (E16.5.5).
6. Show students examples of prepaid mailers and help them prepare work and forms properly for mailing (E16.5.2-E16.5.4).

SELECTED TOOLS AND MATERIALS

Examples of outside processing
Photographic magazines
Yellow pages of local phone directory
Prepaid photographic mailers
Catalogs or price lists if available
Teacher-prepared guidelines for submitting work to an outside lab

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape: The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
AV Program: Finishing and Mounting Prints. Instructional Media Associates, Inc.

SELECTED REFERENCES

American Photographer. American Photographer Magazine.
ASMP Guide to Professional Business Practices in Photography, Latest ed. Arie Kopelman, ed.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Camera Arts. Ziff-Davis Publishing Co.
Petersen's Photographic. Petersen Publishing Co.
Photographer's Market, Latest ed. Robert Lutz, ed.
Professional Photographer. Professional Photographers of America.

Application

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK / COMPETENCY

16.6 Set fees and prepare estimates

COURSE

Commercial Photography II (8608)

16.6

PERFORMANCE OBJECTIVE

P16.6 Given a real or simulated photographic assignment and client and the necessary resources, supplies, and specifications, set approximate fees and prepare an estimate for the client. Performance must be 70 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.6.1 Define and explain the following key terms and concepts related to the setting of fees and the billing of clients: labor, materials, fee schedule, estimate, depreciation, cost overrun, surcharge, and profit.

E16.6.2 Prepare an outlined breakdown of materials and labor.

E16.6.3 List approximate cost of materials to be used.

E16.6.4 List other expenses, such as transportation and outside services.

E16.6.5 Estimate time factor (labor).

E16.6.6 Calculate a percentage surcharge to add to total expenses for possible cost overrun and depreciation of equipment.

E16.6.7 Prepare a sample estimate form, showing the breakdown of services and expenses.

E16.6.8 Prepare a reference schedule of fees for services to be offered.

E16.6.9 Prepare a basic balance sheet of estimated income and expenditures.

CRITERION-REFERENCED MEASURE

C16.6 Set fees and prepare an estimate for a designated client and photographic assignment. Performance must be 70 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to setting fees and preparing an estimate (E16.6.1).
2. Show students an example of a schedule of fees and an estimate for a specific job (E16.6.1).
3. Assign students an exercise in breaking down the costs for a typical job (E16.6.2).
4. Provide students with a list of prices for common photographic supplies (E16.6.3).
5. Provide students with catalogs and listings of local suppliers (E16.6.3).
6. Assign reading in text (E16.6.1-E16.6.9).
7. Give students at least one photographic assignment for which they must obtain supplies, set fees, and prepare an estimate (E16.6.1-E16.6.9)
8. Help students evaluate the accuracy of their estimates after the job is completed (E16.6.1-E16.6.9).

SELECTED TOOLS AND MATERIALS

Price lists
Sample fee schedules and estimate sheets
Catalogs of photographic suppliers
Addresses and phone numbers of local suppliers of photographic goods
Teacher-prepared guidelines on setting fees and preparing estimates

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Educational Dimensions Corp.

SELECTED REFERENCES

ASMP Guide to Professional Business Practices in Photography, Latest ed. Arie Kopelman, ed.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Photographer's Market, Latest ed. Robert Lutz, ed.
Photography and the Law, 5th ed. George Chernoff.
Where and How to Sell Your Photographs, Latest ed. Arvel Ahlers, ed.

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

16.7 Bill client

COURSE

Commercial Photography II (8608)

16.7

PERFORMANCE OBJECTIVE

P16.7 Given a specific simulated or actual job and client and the necessary supplies and information, bill the client. Performance must be 80 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.7.1 Define the following key terms and concepts related to the billing of clients: billing, labor, materials, fee schedule, estimate, invoice, statement, sales tax, and profit.

E16.7.2 Separate and compute labor and materials costs.

E16.7.3 Prepare a fee schedule.

E16.7.4 Prepare an estimate of total costs.

E16.7.5 Calculate sales tax.

E16.7.6 Prepare a sample billing statement form.

E16.7.7 Record transaction and calculate profit.

CRITERION-REFERENCED MEASURE

C16.7 Bill a client for a specific photographic assignment. Performance must be 80 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to billing client (E16.7.1).
2. Show students an example of a bill or invoice (E16.7.1).
3. Assign students an exercise in billing a client (E16.7.2-E16.7.7).
4. Give students at least one photographic assignment for which they must bill their client (E16.7.2-E16.7.7).
5. Assign reading in text (E16.7.1-E16.7.7).

SELECTED TOOLS AND MATERIALS

Sample billing forms
Teacher-prepared guidelines for billing clients

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Educational Dimensions Corp.

SELECTED REFERENCES

ASMP Guide to Professional Business Practices in Photography, Latest ed. Arie Kopelman, ed.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Photographer's Market, Latest ed. Robert Lutz, ed.
Where and How to Sell Your Photographs, Latest ed. Arvel Ahlers, ed.

Application

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

TASK/COMPETENCY

16.8 Prepare work for customer pick-up or delivery

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

16.8

PERFORMANCE OBJECTIVE

P16.8 Given photographic work for a client and the necessary supplies and information, prepare the work for customer pick-up or delivery. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.8.1 Define the following key terms and concepts related to preparation of work for customer pick-up or delivery: billing, invoice, identification data, spotting, and presentation.

E16.8.2 Spot or retouch photographic prints.

E16.8.3 Label photographic prints with complete identification data.

E16.8.4 Complete model release forms.

E16.8.5 Use portrait folders or other presentation formats.

E16.8.6 Prepare bill.

E16.8.7 Keep complete record of customer information for billing and delivery.

E16.8.8 Record billing, pick-up, and payment.

CRITERION-REFERENCED MEASURE

C16.8 Prepare photographic work for customer pick-up or delivery. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to preparing work for a customer pick-up or delivery (E16.8.1).
2. Show students examples of photographic work ready for pick-up or delivery (E16.8.1-E16.8.8).
3. Give students an assignment for which they are to prepare work for pick-up or delivery (E16.8.1-E16.8.8).

SELECTED TOOLS AND MATERIALS

Examples of work ready for pick-up or delivery
Teacher-prepared guidelines for preparing work for customer pick-up or delivery

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Educational Dimensions Corp.

SELECTED REFERENCES

ASMP Guide to Professional Business Practices in Photography, Latest ed. Arie Kopelman, ed.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Photographer's Market, Latest ed. Robert Lutz, ed.
Where and How to Sell Your Photographs, Latest ed. Arvel Ahlers, ed.

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

TASK / COMPETENCY

16.9 Submit photographic work for publication

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

16.9

PERFORMANCE OBJECTIVE

P16.9 Given completed photographic work and the necessary supplies and information, submit a minimum of one piece for news publication. Performance must be 80 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.9.1 Define the following key terms and concepts related to submission of work for news publication: newsletters, publication, news media, picture editor, "flat," contrast, glossy, spotting, reproduction, layout, cropping, news photo, feature photo, submissions, rejections, photographic news, news services (UPI, AP), model release forms, public domain, press passes, caption sheets, and mandatory credit.

E16.9.2 Enlarge photograph for publication.

E16.9.3 Spot photograph.

E16.9.4 Complete the necessary model release forms.

E19.6.5 Use a caption sheet for identification and credits.

E16.9.6 Cite copyright procedures.

E16.9.7 Cite "mandatory credit" notice.

CRITERION-REFERENCED MEASURE

C16.9 Submit a minimum of one piece of photographic work for news publication. Performance must be 80 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss key terms and concepts related to news publication of photographic work (E16.9.1).
2. Have students prepare photographic work for publication (E16.9.2, E16.9.3).
3. Have students complete model release forms as needed (E16.9.4).
4. Discuss different procedures for submitting photographs to be used by news services or specific news publications (E16.9.1-E16.9.7).

SELECTED TOOLS AND MATERIALS

Teacher-prepared guidelines for submitting photographic work for publication

SELECTED AUDIOVISUAL MATERIALS

Film:	Cameras and Careers. Film Rental Center of Syracuse University.
Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Video/Film:	The Photographers. Time-Life Multimedia.
Slide/Tape:	Point of Departure: Developing a Creative Approach to Photography and its Publication. Media Loft, Inc.
Slide/Tape:	Rich Clarkson! Anatomy of a Photo Director. Media Loft, Inc.

SELECTED REFERENCES

ASMP Guide to Professional Business Practices in Photography, Latest ed. Arie Kopelman, ed.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Professional Photographer. Professional Photographers of America.
Photographer's Market, Latest ed. Robert Lutz, ed.
Photography and the Law, 5th ed. George Chernoff.
Photography: What's the Law? Robert M. Cavallo and Stuart Kahan.
Where and How to Sell Your Photographs, Latest ed. Arvel Ahlers, ed.

Application

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

TASK/COMPETENCY

16.10 Submit work to the free-lance photographic marketplace

COURSE

Commercial Photography II (8608)

16.10

PERFORMANCE OBJECTIVE

P16.10 Given a photographic work, the necessary supplies, and various reference books and audiovisual programs, submit work to one prospective buyer of photographs. Performance must be 70 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.10.1 Define the following key terms and concepts related to the photographic marketplace: free-lance vs. studio or staff photographers, marketing, mass market periodicals, trade publications, professional associations, in-house publications, news services (UPI, AP), stock and professional agencies, business stationery, submissions, rejections, model releases, copyright, and ownership vs. use rights.

E16.10.2 Read and interpret standard references on job markets.

E16.10.3 List categories of photographic marketplaces.

E16.10.4 Select a field of interest among buyers of photographs.

E16.10.5 Read and interpret guidelines or criteria for submission of work.

E16.10.6 Obtain address for a selected photographic buyer.

E16.10.7 Prepare photographic work for submission.

E16.10.8 Prepare a letter to accompany submission.

E16.10.9 Cite copyright procedures.

E16.10.10 Complete the necessary model release forms.

CRITERION-REFERENCED MEASURE

C16.10 Submit work to one prospective buyer in the free-lance photographic marketplace. Performance must be 70 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define key terms and concepts related to the photographic marketplace (E16.10.1).
2. Identify and discuss examples of various users and buyers of free-lance work (E16.10.1).
3. Show students free-lance promotional materials (Examples: business cards, promotional pictures, resumes, published work samples, slide portfolios, and other visuals to accompany submissions) (E16.10.7).
4. Assign reading in text and show AV programs on free-lance photography (E16.10.1-E16.10.10).
5. Have students research and list categories of users of photographs (E16.10.2, E16.10.3).
6. Have students select a specific market and two or three possible users to whom they will send work (E16.10.4).
7. Have students practice writing sample letters to accompany submissions (E16.10.8).
8. Have students review copyright procedures and ownership vs. use rights (E16.10.9).
9. Help students obtain and use client or model release forms (E16.10.10).
10. Help students package work for submission (E16.10.7).

SELECTED TOOLS AND MATERIALS

Examples of users of photographs: mass-market periodicals, trade magazines, books, calendars, or posters

Sample business letters, slide portfolios, promotional stationery, model release forms, and copyright memos

Sample business labeling stamps and copyright stamp

Mailing folders or fiber boxes

Teacher-prepared guidelines for submitting photographic work to free-lance photographic marketplace

SELECTED AUDIOVISUAL MATERIALS

Film:	Cameras and Careers. Film Rental Center of Syracuse University.
Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Education Dimensions Corp.
AV Program:	Photographic Copying. Instructional Media Associates, Inc.
Slide/Tape:	Point of Departure: Developing a Creative Approach to Photography and its Publication. Media Loft, Inc.
Slide/Tape:	Rich Clarkson! Anatomy of a Photo Director. Media Loft, Inc.

SELECTED REFERENCES

Advertising Photography. Allyn Salomon.

ASMP Guide to Professional Business Practices in Photography, Latest ed. Arie Kopelman, ed.

The Business of Photography. Robert M. Cavallo and Stuart Kahan.

Occupational Brief: Photographers. Chronicle Guidance Publications, Inc.

Professional Photographer. Professional Photographers of America.

Photographer's Market, Latest ed. Robert Lutz, ed.

Photography and the Law, 5th ed. George Chernoff.

Photography: What's the Law? Robert M. Cavallo and Stuart Kahan.

Where and How to Sell Your Photographs, Latest ed. Arvel Ahlers, ed.

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

TASK/COMPETENCY

16.11 Exhibit work

Application

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

16.11

PERFORMANCE OBJECTIVE

P16.11 Given a photographic work mounted or matted for display and the necessary supplies and information, submit work for exhibition. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.11.1 Define and explain the following key terms and concepts related to the submission of photographic work for exhibition: submissions, rejections, exhibition, gallery, consignment, pricing, nfs = "not-for-sale," juried and non-juried, awards, labeling, copyright, entry fee, mounting, matting (overmatting), spotting (retouching), framing, and section frames.

E16.11.2 List advantages and disadvantages of exhibiting work.

E16.11.3 List steps in preparing work for exhibition.

E16.11.4 List criteria for selecting work for exhibition.

E16.11.5 Produce a photographic image to meet standard aesthetic and technical criteria.

E16.11.6 Produce a photographic print to meet archival standards.

E16.11.7 Select work for exhibition.

E16.11.8 Mount and/or overmat a piece of work for exhibition.

E16.11.9 Complete the necessary model release forms.

E16.11.10 Correctly title, sign, and label work for submission.

E16.11.11 Frame a photograph, using section frames.

E16.11.12 Pay fee as needed.

E16.11.13 View and critique an exhibition.

CRITERION-REFERENCED MEASURE

C16.11 Submit photographic work for exhibition. Performance must be 100 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Define key terms and concepts related to exhibiting photographic work (E16.11.1).
2. Organize a field trip to a photographic exhibit; have students critique the exhibit (E16.11.1-E16.11.13).
3. Have students review and practice spotting, mounting, and matting photographs (E16.11.8).
4. Assign students a project in which they select, prepare, and submit work for a local display or exhibit (E16.11.1-E16.11.13).
5. Supervise students in organizing an in-house photographic display (E16.11.1-E16.11.13).
6. Have students prepare, select, and submit work for a juried exhibition (E16.11.1-E16.11.13).
7. Have students view and critique an exhibit of their own work (E16.11.13).
8. Have advanced students produce work for submission to an invitational exhibit (E16.11.1-E16.11.13).
9. Have students frame work, using section frames (E16.11.11).
10. Have students read an exhibition review; have them practice writing an exhibition review (E16.11.13).

SELECTED TOOLS AND MATERIALS

Examples of work ready for exhibit
Print presentation and framing equipment (See Appendix D, #14)
Teacher-prepared guidelines for exhibiting photographic work

SELECTED AUDIOVISUAL MATERIALS

Film:	Cameras and Careers. Film Rental Center of Syracuse University.
Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Education Dimensions Corp.
AV Program:	Finishing and Mounting Prints. Instructional Media Associates, Inc.
Video/Film:	The Photographers. Time-Life Multimedia.
AV Program:	Photographic Copying. Instructional Media Associates, Inc.

SELECTED REFERENCES

Afterimage. Visual Studies Workshop.
Photography, 2nd ed., Chapters 1, 14, and 16, pp. 1-6. Barbara Upton and John Upton.
Photography, 2nd ed., Chapter 14. Charles Swedlund.

Application

DUTY AREA

16. MARKETING, PUBLISHING, AND EXHIBITING WORK

TASK/COMPETENCY

16.12 Prepare necessary documents for marketing, publishing, and exhibiting work

PROGRAM

COMMERCIAL PHOTOGRAPHY OCCUPATIONS (48.0204)

COURSE

Commercial Photography I (8607)
Commercial Photography II (8608)

16.12

PERFORMANCE OBJECTIVE

P16.12 Given a stated marketing, publishing, or exhibiting opportunity, prepare the necessary documents. Performance must be 80 percent correct according to instructor's written guidelines.

SELECTED ENABLING OBJECTIVES

E16.12.1 Identify and define purpose of key documents for working photographers, including the following: press passes and permits, model release forms, identification stamps or labels, copyright forms, and resume.

E16.12.2 Cite situations requiring press passes or permits.

E16.12.3 Cite situations requiring model release forms.

E16.12.4 Use identification stamps or labels or cite information needed for full identification and credits.

E16.12.5 Cite copyright procedures.

E16.12.6 Use copyright symbol stamp or label.

E16.12.7 Use press pass or permit in appropriate situation.

E16.12.8 Complete model release forms as needed.

E16.12.9 Use a mandatory credit notice.

E16.12.10 Use a caption sheet.

E16.12.11 Prepare a resume.

CRITERION-REFERENCED MEASURE

C16.12 Prepare the necessary documents for a stated marketing, publishing, or exhibition opportunity. Performance must be 80 percent correct according to instructor's written guidelines.

SELECTED INSTRUCTIONAL ACTIVITIES

1. Have students define and discuss purpose of key documents used by photographers when marketing, publishing, or exhibiting work (E16.12.1).

2. Have students list the documents needed for specified sample situations (E16.12.2-E16.12.11).

3. Have students develop procedure for identifying all finished work to be submitted, presented, or maintained in a portfolio (E16.12.4).

4. Have students cite copyright procedures (E16.12.5).

5. Have students practice using copyright symbol stamp or labels (E16.12.6).

6. Have students cite situations where model release forms would be required (E16.12.3).

7. Have students prepare a resume (E16.12.11).

8. Provide students with samples of documents (E16.12.2-E16.12.11).

9. Discuss situations where the lack of appropriate documents might cause problems (E16.12.2-E16.12.11).

SELECTED TOOLS AND MATERIALS

Samples of press passes, permits, model release forms, ID forms, copyright forms, and resumes

Teacher-prepared guidelines for preparing documents for marketing, publishing, and exhibiting work

SELECTED AUDIOVISUAL MATERIALS

Slide/Tape:	The Challenge of Freelance Photography: An Interview with Judith Gefter. Media Loft, Inc.
Filmstrip/Cassette:	Creating a Professional Portfolio. Educational Dimensions Corp.

SELECTED REFERENCES

ASMP Guide to Professional Business Practices in Photography, Latest ed. Arie Kopelman, ed.
The Business of Photography. Robert M. Cavallo and Stuart Kahan.
Photography and the Law, 5th ed. George Chernoff.
Photography: What's the Law? Robert M. Cavallo and Stuart Kahan.
Where and How to Sell Your Photographs, Latest ed. Arvel Ahlers, ed.

SECTION 2.

PROGRAMS AND COURSES

The instructional emphasis in Trade and Industrial Education is placed on meeting the occupational objectives of the individual student. The secondary school student may pursue study through available options within any of the Trade and Industrial Education programs.

Students may choose either of two options to meet the requirements for the program of Commercial Photography Occupations. Included in the first part of this section are descriptions of the program, listings of program courses and options, and DOT job codes and titles related to the program.

Included in the second part of this section are descriptions of the secondary Commercial Photography courses. The courses are approved by the Virginia Department of Education and are based on the task inventory presented in the previous guide section. The "Task/Competency Sequence" lists the tasks of that section in suggested instructional order for each course. The course outlines have been cross-referenced with the task inventory sheets to assist the instructor in identifying instructional objectives, materials, criterion standards, and reference materials.

SECONDARY PROGRAMS AND COURSES

PROGRAM TITLE:	COMMERCIAL PHOTOGRAPHY OCCUPATIONS
DESCRIPTION:	The Commercial Photography Program is designed to prepare students to work in one of several occupations requiring skills associated with the photographic industry. Learning experiences will include the study and use of equipment and processes which reproduce images on light-sensitive emulsions on film and paper.
CIP CODE:	48.0204
SUGGESTED GRADE LEVELS:	10 - 12

APPROVED COURSE	VA COURSE CODE	DOT CODE/TITLE (selected)
Commercial Photography I	8607	976.667-010 Photographer Helper 976.687-010 Photofinishing Laboratory Worker 143.062-034 Photojournalist 976.487-010 Photograph Finisher
Commercial Photography II	8608	143.062-030 Photographer, Still 143.062-034 Photojournalist

PROGRAM OPTIONS: Option I: 8607, 8608
Option II: 8607, 8608, 8609 (Option II is designed as a three-year, double-period program for students in grades 10-12. For additional information see the VEMS supplement, Student Planning Guide.)

SOURCE: Student Planning Guide, VEMS Supplement

COMMERICAL PHOTOGRAPHY I (8607)

Description and Sequence

Course Description: Commercial Photography I is a triple-period class. Instruction includes types and operation of cameras and accessories most commonly used in the photographic industry; 35mm camera techniques; film types; exposure instruments and techniques; critique skills; portfolio development; and the publication, presentation, and exhibition of finished work.

Prerequisites: None

Suggested Grade Level: 10 - 12

Task/Competency Sequence

1.3 Identify characteristics of various types of cameras
1.4 Identify characteristics of various types of photographic filters
1.5 Identify characteristics of various types of meters
1.6 Identify characteristics of various types of lenses
1.7 Identify characteristics of basic accessories
1.8 Identify characteristics of studio equipment
1.1 Select film
2.1 Load and unload a 35mm single lens reflex camera
2.2 Set ASA
2.3 Load and unload a 35mm film cassette
2.4 Turn on and read in-camera meter
2.5 Set shutter speed and adjust aperture
2.6 Set aperture and adjust shutter speed
2.7 Frame, focus, and shoot picture
2.8 Rewind film
2.9 Maintain 35mm single lens reflex camera
3.1 Plan setting/background. composition, camera angle, and camera distance for a simple head-and-shoulders portrait with existing artificial light
3.2 Plan setting/background, composition, camera angle, camera distance, and lighting for a simple outdoor head-and-shoulders portrait in diffused sunlight
3.3 Plan setting, composition, camera angle, camera distance, and lighting for a simple outdoor head-and-shoulders portrait in bright or hazy sunlight
3.4 Plan setting/background, composition, camera angle, camera distance, and lighting for a series of outdoor portraits of one subject
3.5 Plan setting/background, composition, camera angle, camera distance, and lighting for a simple indoor head-and-shoulders close-up

Task/Competency Sequence

3.6 Plan setting/background, composition, camera angle, camera distance, and lighting for a simple indoor portrait with window lighting
3.7 Plan location, setting, composition, camera angle, camera distance, and lighting for an informal small group portrait with existing indoor or outdoor light
3.8 Plan location, setting, composition, camera angle, camera distance, and lighting for a simple still life with one lamp plus reflector
4.1 Use camera with built-in reflected-light meter and standard 18% neutral gray card
4.2 Calculate exposure with a hand-held reflected-light meter, using standard 18% neutral gray card
4.3 Calculate exposure with an incident-light meter
4.4 Calculate exposure with a hand-held spot meter
4.5 Calculate exposure with a hand-held flash exposure meter
4.6 Estimate light level without use of meter or exposure chart and set camera exposure controls
4.7 Interpret exposure chart to estimate light and set camera exposure controls
4.8 Determine exposure with reflected-light meter, using the overall reading technique
4.9 Determine exposure with reflected-light meter, using palm-of-hand substitution technique
4.10 Determine exposure with reflected-light meter, using averaged-readings technique
4.16 Adjust camera exposure controls to compensate for reciprocity failure factor
4.17 Adjust camera exposure controls to compensate for filter factors
1.9 Identify characteristics of darkroom and finishing lab equipment
1.2 Select photographic papers
7.1 Select and prepare chemicals for black and white film processing
7.2 Process black and white roll film
7.4 Push/pull process black and white film
7.5 Detect, read, and correct negative errors
7.6 Select paper and make contact print
7.7 Select paper and make enlargement on fiber-based paper
7.8 Select paper and make enlargement on resin-coated paper
7.9 Make print, using graded and variable contrast papers
7.10 Detect, read, and correct print errors
7.11 Process and print, using local controls
7.12 Make an archival print for exhibition
7.13 Dry mount a print for presentation
7.14 Mat a print for archival presentation
7.15 Make a print suitable for publication
7.16 Retouch a finished print
7.17 Tone a print for visual effect or permanence
7.24 Maintain photo lab
5.1 Select and use shutter speed technique
5.2 Select and use aperture setting for depth of field
5.3 Select and use focusing technique
5.4 Select and use filters

Task/Competency Sequence

5.5 Select and use lenses
8.1 Document an activity or event
8.2 Photograph an environmental portrait
8.3 Produce a spot news photograph under a deadline
8.4 Produce a documentary photo-essay
9.1 Photograph an architectural exterior
9.3 Photograph a landscape (urban, rural)
10.1 Create an image to communicate a message
10.2 Create an image to convey a mood or emotion
10.3 Create a photographic series based on visual design
10.4 Create a photographic sequence based on time (photo story)
10.5 Create a photographic essay based on a subject, concept, or theme
11.1 Identify use and characteristics of studio equipment, lights, and accessories
11.2 Meter studio lighting
11.3 Shoot a passport or ID photograph
11.4 Shoot an individual studio portrait
11.5 Shoot a group studio portrait
11.6 Photograph, process, and present finished studio portraits
11.7 Photograph, process, and present finished studio still-lifes
11.8 Create original lighting effects
12.1 Define client's need and product image
12.2 Plan and execute a photograph for commercial purposes
12.3 Prepare finished photos for presentation
13.1 Identify characteristics of special silver and non-silver photosensitive materials
13.2 Produce prints, using special techniques
15.1 Identify the use of visual language (elements and principles of design and composition)
15.2 Identify past and present uses, methods, styles, movements, and directions in photography
15.3 Investigate works of famous photojournalists and artists
15.4 Critique photographic work in terms of technique, content, and aesthetics
15.5 Review and critique a photographic art show, exhibit, or display
15.6 Identify common camerawork errors
15.7 Identify common processing errors
16.1 Maintain appropriate records and files
16.2 Develop and maintain portfolio
16.4 Assist in advertising campaign
16.8 Prepare work for customer pick-up or delivery
16.9 Submit photographic work for publication
16.11 Exhibit work
16.12 Prepare necessary documents for marketing, publishing, and exhibiting work

COMMERCIAL PHOTOGRAPHY I (8607)

Content Outline	Task/Competency Code
I. Orienting the student	
A. Discussing school and classroom policies	None
B. Relating course objectives	None
C. Providing occupational overview	None
D. Providing laboratory orientation	None
E. Identifying safety procedures	None
F. Describing VICA	None
II. Introducing basic skills	
A. Presenting an overview	All competencies
1. Terminology	
2. Light and photo-sensitive materials	
3. Steps in the photographic process (plan, shoot, process, finish)	
4. Four general career categories	
B. Selecting and assembling equipment and supplies	
1. Characteristics of various types of cameras	P1.3
2. Characteristics of photographic filters	P1.4
3. Characteristics of meters	P1.5
4. Characteristics of lenses	P1.6
5. Basic camera accessories	P1.7
6. Characteristics of studio equipment	P1.8
7. Film selection	P1.1
C. Operating and maintaining 35mm single lens reflex camera	
1. Loading and unloading of camera	P2.1
2. ASA setting	P2.2
3. Loading and unloading of film cassette	P2.3
4. In-camera meter reading	P2.4
5. Setting of shutter speed and adjusting of aperture	P2.5
6. Setting of aperture and adjusting of shutter speed	P2.6
7. Framing, focusing, and shooting of picture	P2.7
8. Rewinding of film	P2.8
9. Maintenance of 35mm single lens reflex camera	P2.9
D. Planning and setting up simple subjects	
1. Head-and-shoulders portrait with existing artificial light	P3.1
2. Head-and-shoulders portrait in diffused sunlight	P3.2

Content Outline	Task/Competency Code
3. Head-and-shoulders portrait in bright or hazy sunlight	P3.3
4. Series of outdoor portraits of one subject	P3.4
5. Indoor head-and-shoulders close-up portrait of one subject with single lamp lighting	P3.5
6. Indoor portrait with window lighting	P3.6
7. Informal small group portrait with existing light	P3.7
8. Simple still life with one lamp and reflector	P3.8
E. Determining exposure and operating meters	
1. Use of built-in camera meter	P4.1
2. Use of hand-held reflected-light meter	P4.2
3. Use of hand-held incident-light meter	P4.3
4. Use of hand-held spot meter	P4.4
5. Use of hand-held flash exposure meter	P4.5
6. Estimation of light level	P4.6
7. Use of exposure chart	P4.7
8. Use of reflected-light meter with the overall reading technique	P4.8
9. Use of reflected-light meter with the palm-of-hand substitution technique	P4.9
10. Use of reflected-light meter with the averaged-readings (luminance range) technique	P4.10
11. Adjustment of exposure to compensate for reciprocity failure factor	P4.16
12. Adjustment of exposure to compensate for filter factors	P4.17
F. Processing and finishing film and prints	
1. Darkroom and finishing lab equipment	P1.9
2. Selection of photographic papers	P1.2
3. Selection and preparation of chemicals for black and white film processing	P7.1
4. Processing of black-and-white roll film	P7.2
5. Push/pull processing of black and white film	P7.4
6. Negative errors	P7.5
7. Contact printing	P7.6
8. Printing of enlargements on fiber-based paper	P7.7
9. Printing of enlargements on resin-coated paper	P7.8
10. Printing of photographs on graded and variable-contrast papers	P7.9
11. Print errors	P7.10

Content Outline	Task/Competency Code
12. Local controls	P7.11
13. Archival printing for exhibition	P7.12
14. Dry mounting techniques	P7.13
15. Matting procedures	P7.14
16. Printing for publication	P7.15
17. Retouching procedures	P7.16
18. Toning techniques	P7.17
19. Maintenance of black-and-white photo lab	P7.24
G. Using camera controls and accessories for creative effect	
1. Shutter speed technique	P5.1
2. Aperture and depth of field	P5.2
3. Focusing technique	P5.3
4. Filters	P5.4
5. Lenses	P5.5
III. Taking photographs for first year assignments	
A. Documenting people and events	
1. Activity or event	P8.1
2. Environmental portrait	P8.2
3. Spot news photograph under deadline	P8.3
4. Documentary photo-essay	P8.4
B. Photographing architectural subjects and landscapes	
1. Architectual exterior	P9.1
2. Landscape (urban, rural)	P9.3
C. Photographing for creative effect and self-expression	
1. Communication of a message	P10.1
2. Images to convey a mood or emotion	P10.2
3. Series based on visual design	P10.3
4. Sequence based on time (photo story)	P10.4
5. Photo-essay based on a subject, concept, or theme	P10.5
D. Using studio lighting	
1. Studio equipment, lights, and accessories	P11.1
2. Metering of studio lighting	P11.2
3. Passport or ID photography	P11.3
4. Individual studio portrait	P11.4
5. Group studio portrait	P11.5
6. Series of studio portraits	P11.6
7. Studio still life	P11.7
8. Original lighting effects	P11.8

Content Outline	Task/Competency Code
E. Photographing subjects for commercial use	
1. Client's need and product image	P12.1
2. Execution of a commercial photograph	P12.2
3. Presentation of a commercial photograph	P12.3
F. Using special materials and techniques	
1. Characteristics of special materials (silver-based)	P13.1
2. Production of prints, using special techniques (silver-based)	P13.2
IV. Developing critical skills	
A. Using visual language through design and composition	P15.1
B. Identifying past and present uses, methods, styles, movements, and directions in photography	P15.2
C. Identifying famous photojournalists and artists	P15.3
D. Critiquing work for technique, content, and aesthetics	P15.4
E. Reviewing a photographic show, exhibit, or display	P15.5
F. Identifying common camerawork errors	P15.6
G. Identifying common processing errors	P15.7
V. Marketing, publishing, and exhibiting work	
A. Maintaining records and files	P16.1
B. Developing a portfolio	P16.2
C. Participating in an advertising campaign	P16.4
D. Preparing work for customer pick-up or delivery	P16.8
E. Submitting work for publication	P16.9
F. Exhibiting work	P16.11
G. Preparing necessary documents	P16.12

COMMERCIAL PHOTOGRAPHY II (8608)

Description and Sequence

Course Description:

Commercial Photography II is a triple-period class. In this course, advanced instruction and practice are provided in skills and procedures introduced in Commercial Photography I, especially in commercial work for clients and in the marketing, publishing, and exhibiting of photographic products.

Instruction and practice are provided in color photography; lab processing skills, using color reversal and negative materials; copywork; and view camera photography.

Prerequisites: Commercial Photography I (8607)

Suggested Grade Level: 10 - 12

Task/Competency Sequence

1.1 Select film
1.4 Identify characteristics of various types of photographic filters
1.8 Identify characteristics of studio equipment
8.1 Document an activity or event
8.2 Photograph an environmental portrait
8.3 Produce a spot news photograph under a deadline
9.1 Photograph an architectural exterior
9.2 Photograph an architectural interior
9.3 Photograph a landscape (urban, rural)
5.1 Select and use shutter speed technique
5.2 Select and use aperture setting for depth of field
5.3 Select and use focusing technique
5.4 Select and use filters
5.5 Select and use lenses
10.1 Create an image to communicate a message
10.2 Create an image to convey a mood or emotion
10.3 Create a photographic series based on visual design
10.5 Create a photographic essay based on a subject, concept, or theme
11.1 Identify use and characteristics of studio equipment, lights, and accessories
11.2 Meter studio lighting
11.4 Shoot an individual studio portrait
11.6 Photograph, process, and present finished studio portraits
11.7 Photograph, process, and present finished studio still-lifes
11.8 Create original lighting effects

Task/Competency Sequence

1.9	Identify characteristics of darkroom and finishing lab equipment
1.2	Select photographic papers
7.18	Select and prepare chemicals for color processing
7.19	Process E-6 color reversal film (slides)
7.20	Process color negative film
7.21	Push/pull process color film
7.22	Process prints from color slides
7.23	Process color prints from color negatives
7.24	Maintain photo lab (color)
7.12	Make an archival print for exhibition
7.14	Mat a print for archival presentation
7.17	Tone a print for visual effect or permanence
7.3	Process black and white sheet film
7.24	Maintain photo lab (black and white)
6.1	Load and unload sheet film into holders
6.2	Adjust camera to compensate for bellows extension
6.3	Adjust camera to compensate for distorted perspective
6.4	Use ground glass to adjust focus
6.5	Maintain view camera
4.1	Use camera with built-in reflected-light meter and standard 18% neutral gray card
4.2	Calculate exposure with a hand-held reflected-light meter, using a standard 18% neutral gray card
4.3	Calculate exposure with an incident-light meter
4.4	Calculate exposure with a hand-held spot meter
4.5	Calculate exposure with a hand-held flash exposure meter
4.11	Determine exposure, using the zone system technique of reading textured shadow area in a scene with a normal luminance range
4.12	Determine exposure, using the zone system technique of reading a key tone in a scene with a normal luminance range
4.13	Determine exposure, using an advanced zone system technique in a scene with a normal luminance range
4.14	Determine exposure, using an advanced zone system technique in low luminance range (flat) situations
4.15	Determine exposure, using an advanced zone system in high luminance range (contrasty) situations
4.16	Adjust camera exposure controls to compensate for reciprocity failure factor
4.17	Adjust camera exposure controls to compensate for filter factors
12.1	Define client's need and product image
12.2	Plan and execute a photograph for commercial purposes
12.3	Prepare finished photos for presentation
13.1	Identify characteristics of special silver and non-silver photosensitive materials
13.2	Produce prints, using special techniques
14.1	Make a copy of a visual piece
14.2	Duplicate slides
14.3	Make copy slides of a visual piece
15.1	Identify the use of visual language (elements and principles of design and composition)

Task/Competency Sequence

15.2 Identify past and present uses, methods, styles, movements, and directions in photography
15.3 Investigate works of famous photojournalists and artists
15.4 Critique photographic work in terms of technique, content, and aesthetics
15.5 Review and critique a photographic art show, exhibit, or display
16.1 Maintain appropriate records and files
16.2 Develop and maintain portfolio
16.3 Prepare a slide portfolio
16.4 Assist in advertising campaign
16.5 Submit work to an outside lab
16.6 Set fees and prepare estimates
16.7 Bill client
16.8 Prepare work for customer pick-up or delivery
16.10 Submit work to the free-lance photographic marketplace
16.9 Submit photographic work for publication
16.11 Exhibit work
16.12 Prepare necessary documents for marketing, publishing, and exhibiting work

COMMERCIAL PHOTOGRAPHY II (8608)

Content Outline	Task/Competency Code
I. Orienting the student	
A. Discussing school and classroom policies	None
B. Relating course objectives	None
C. Reviewing occupational opportunities	None
D. Reviewing lab procedures and rules	None
E. Reviewing safety procedures	None
F. Discussing VICA	None
II. Reviewing camera skills in color slide photography	
A. Selecting and assembling equipment and supplies for color photography	
1. Color film selection	P1.1
2. Characteristics of filters for color photography	P1.4
3. Characteristics of studio equipment for color photography	P1.8
B. Documenting people and events in color	
1. Activity or event	P8.1
2. Environmental portrait	P8.2
3. Spot news photograph under deadline	P8.3
C. Photographing architectural subjects and landscapes in color	
1. Architectural exterior	P9.1
2. Architectural interior	P9.2
3. Landscape (urban, rural)	P9.3
D. Photographing for creative effect and self-expression in color	
1. Shutter speed technique	P5.1
2. Aperture and depth of field	P5.2
3. Focusing technique	P5.3
4. Filters	P5.4
5. Lenses	P5.5
6. Communication of a message	P10.1
7. Images to convey a mood or emotion	P10.2
8. Series based on visual design	P10.3
9. Photo-essay based on a subject, concept, or theme	P10.5
E. Using studio lighting in color photography	
1. Studio equipment, light, and accessories	P11.1
2. Review of metering	P11.2
3. Individual studio portrait	P11.4

Content Outline	Task/Competency Code
4. Series of studio portraits	P11.6
5. Studio still life	P11.7
6. Original lighting effects	P11.8
III. Processing and finishing color film and prints	
A. Identifying color darkroom and finishing lab equipment	P1.9
B. Selecting color photographic papers	P1.2
C. Selecting and preparing chemicals for color processing	P7.18
D. Processing E-6 color reversal film (slides)	P7.19
E. Processing color negative film	P7.20
F. Push/pull processing color film	P7.21
G. Processing prints from color slides	P7.22
H. Processing color prints from color negatives	P7.23
I. Maintaining color photo lab	P7.24
IV. Reviewing and refining black-and-white processing skills	
A. Archival printing for exhibition	P7.12
B. Matting photographs	P7.14
C. Toning photographs	P7.17
D. Processing black-and-white sheet film	P7.3
E. Maintaining black-and-white photo lab	P7.24
V. Operating and maintaining view camera	
A. Loading and unloading sheet film	P6.1
B. Compensating for bellows extension	P6.2
C. Compensating for distorted perspective	P6.3
D. Focusing on ground glass	P6.4
E. Maintaining view camera	P6.5
VI. Determining exposure and operating meters	
A. Reviewing use of camera with built-in reflected-light meter and standard 18% neutral gray card	P4.1
B. Reviewing exposure calculation with hand-held reflected-light meter and standard 18% neutral gray card	P4.2
C. Reviewing exposure calculation with an incident-light meter	P4.3
D. Reviewing exposure calculation with a spot hand-held meter	P4.4
E. Calculating exposure with a hand-held flash exposure meter	P4.5

Content Outline	Task/Competency Code
F. Determining exposure, using zone system technique of reading textured shadow area in scene with normal luminance range	P4.11
G. Determining exposure, using zone system technique of reading key tone in scene with normal luminance range	P4.12
H. Determining exposure, using advanced zone system technique in scene with normal luminance range	P4.13
I. Determining exposure, using advanced zone system technique in low luminance range (flat) situations	P4.14
J. Determining exposure, using advanced zone system technique in high luminance range (contrasty) situations	P4.15
K. Adjusting exposure to compensate for reciprocity failure factor	P4.16
L. Adjusting exposure to compensate for filter factors	P4.17
VII. Photographing subjects in color for commercial purposes	
A. Identifying client's need and product image	P12.1
B. Producing a color commercial photograph	P12.2
C. Presenting a color commercial photograph	P12.3
VIII. Using special materials and techniques	
A. Identifying characteristics of silver and non-silver photo-sensitive materials	P13.1
B. Producing prints, using special techniques	P13.2
IX. Making photographic copies	
A. Producing a copy print of a visual piece	P14.1
B. Duplicating slides	P14.2
C. Copying slides	P14.3
X. Developing critical skills	
A. Refining visual language through design and composition	P15.1
B. Identifying past and present uses, methods, styles, movements, and directions in photography	P15.2

Content Outline	Task/Competency Code
C. Identifying famous photojournalists and artists	P15.3
D. Critiquing work for technique, contrast, and aesthetics	P15.4
E. Reviewing photographic show, exhibit, or display	P15.5
XI. Marketing, publishing, and exhibiting work	
A. Maintaining records and files	P16.1
B. Developing a portfolio	P16.2
C. Preparing a slide portfolio	P16.3
D. Participating in an advertising campaign	P16.4
E. Submitting work to an outside lab	P16.5
F. Determining fees and estimates	P16.6
G. Billing the customer	P16.7
H. Preparing work for customer pick-up or delivery	P16.8
I. Submitting work to the free-lance marketplace	P16.10
J. Submitting work for publication	P16.9
K. Exhibiting work	P16.11
L. Preparing necessary documents	P16.12

APPENDICES

Appendix A:	Information and Resources Books Book Collections, Photographic Series, and Major Photographic Publishers Other Resource Materials Periodicals
Appendix B:	Professional Associations
Appendix C:	Audiovisual Materials
Appendix D:	List of Equipment and Supplies
Appendix E:	Checklists

APPENDIX A

Information and Resources

Books

Adams, Ansel. The Portfolios of Ansel Adams. Boston, Massachusetts: New York Graphic Society, 1977.

Ahlers, Arvel, ed. Where and How to Sell Your Photographs. Latest edition. Garden City, New York: Amphoto Books.

Alesse, Craig. Basic 35mm Photo Guide. Amherst, New York: Amherst Media, 1981.

Allard, William Albert. Vanishing Breed: Photographs of the Cowboy and the West. Boston, Massachusetts: New York Graphic Society, 1982.

The American Image: Photographs from the National Archives, 1860-1960. New York, New York: Pantheon Books, 1979.

Arbus, Diane. Diane Arbus. Millerton, New York: Aperture, Inc., 1973.

Avedon, Richard. Portraits. New York: Farrar, Straus, and Giroux, 1976.

Bayer, Jonathan. Reading Photographs: Understanding the Aesthetics of Photography. New York, New York: Pantheon Books, 1977.

Benedict, Joel A. Basic Photography: Camera Techniques and Darkroom Procedures Manual. Tempe, Arizona: Instructional Media Associates, Inc., 1981.

Broecker, William L., ed. Current 35mm Practice: Complete Reference Data for Every 35mm Photographer. Dobbs Ferry, New York: Morgan and Morgan Press, Inc., 1975.

Brooks, Davis. How to Control and Use Photographic Lighting. H. P. Books Photographic Series. Tucson, Arizona: Fisher Publishing, Inc., 1980.

Bullock, Wynn. Wynn Bullock, Photographs. Oakland, California: Scrimshaw Press, 1971.

Careers in the Visual Arts. New York, New York: School of Visual Arts, 1975.

Carroll, Don, and Carroll, Marie. Focus on Special Effects: Creating Pictures that Exist Only in Your Mind. Garden City, New York: Amphoto Books, 1982.

Carroll, John S. Photographic Lab Handbook. 5th ed. Garden City, New York: Amphoto Books, 1979.

Cartier-Bresson, Henri. Henri Cartier-Bresson, Photographer. Boston, Massachusetts: New York Graphic Society, 1979.

Cavallo, Robert M., and Kahan, Stuart. The Business of Photography. New York, New York: Crown Publishing, Inc., 1981.

Cavallo, Robert M., and Kahan, Stuart. Photography: What's the Law? New York, New York: Crown Publishing, Inc., 1976.

Chernoff, George. Photography and the Law. 5th ed. Garden City, New York: Amphoto Books, 1978.

Cohen, Joyce Tennyson. In/Sights. Boston, Massachusetts: David R. Godeline, 1978.

Coles, Robert. Dorothea Lange: Photographs of a Lifetime. Millerton, New York: Aperture, Inc., 1982.

Craven, George M. Object and Image: An Introduction to Photography. 2nd ed. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1982.

Crawford, Tad. Legal Guide for the Visual Artist. New York, New York: St. Martin's Press, 1980.

Crawford, William. The Keepers of Light: A History and Working Guide to Early Photographic Processes. Dobbs Ferry, New York: Morgan and Morgan Press, Inc., 1979.

Curtin, Dennis, and Do Maio, Joe. Darkroom Handbook: A Complete Guide to the Best Design, Construction, and Equipment. New York, New York: Van Nostrand Reinhold Co., 1979.

Dater, Judy, and Welpott, Jack. Women and Other Visions. Dobbs Ferry, New York: Morgan and Morgan Press, Inc., 1975.

Davidson, Bruce. Bruce Davidson Photographs. New York, New York: Summit Books, 1979.

Davis, Phil. Photography. 4th ed. Dubuque, Iowa: William C. Brown Co., 1982.

DeCarava, Roy. Roy DeCarava: Photographs. Carmel, California: The Friends of Photography, 1981.

The Diana Show, Pictures through a Plastic Lens (Part of an untitled portfolio series). Carmel, California: The Friends of Photography, 1980.

Doty, Robert, ed. Photography in America. New York, New York: Greenwich House, 1974.

Edey, Maitland, ed. Great Photographic Essays from LIFE. Boston, Massachusetts: New York Graphic Society, 1978.

The Family of Man. New York, New York: The Museum of Modern Art, 1955.

Frank, Robert. The Americans. 3rd ed. Millerton, New York: Aperture, Inc., 1978.

Freeman, Roland L. Southern Roads/City Pavements: Photographs of Black Americans. New York, New York: International Center for Photography, 1981.

Garnett, William. The Extraordinary Landscape: Aerial Photographs of America. Boston, Massachusetts: New York Graphic Society, 1982.

Gasson, Arnold. Handbook for Contemporary Photography. 4th ed. Rochester, New York: Light Impressions Corp., 1972.

Gibson, Ralph. Deja Vu. Minneapolis, Minnesota: Media Loft, Inc.

Gibson, Ralph. The Somnambulist. Minneapolis, Minnesota: Media Loft, Inc.

Gibson, Ralph, ed. SX-70 Art. Rochester, New York: Lustrum Press, 1980.

Graves, Carson. The Zone System for 35mm Photographers. New York, New York: Van Nostrand Reinhold Co., 1982.

Green, Jonathan. The Snapshot. Millerton, New York: Aperture, Inc., 1974.

Haas, Ernst. The Creation. New York, New York: Penguin Books, 1976.

Hattersley, Ralph. Beginner's Guide to Darkroom Techniques. Garden City, New York: Doubleday Dolphin Books, 1976.

Hattersley, Ralph. Discover Yourself through Photography: A Creative Workbook for Amateur and Professional. Dobbs Ferry, New York: Morgan and Morgan Press, Inc., 1979.

Hedgecoe, John. The Art of Color Photography. New York, New York: Simon and Schuster, 1978.

Hedgecoe, John. The First Book of Photography. New York, New York: Alfred A. Knopf, 1980.

Horenstein, Henry. Beyond Basic Photography. Boston, Massachusetts: Little, Brown, and Co., 1977.

Horenstein, Henry. Black and White Photography: A Basic Manual. Boston, Massachusetts: Little, Brown, and Co., 1977.

Kelly, Jain, ed. Darkroom II. Rochester, New York: Lustrum Press, 1978.

Kodak. Applied Infrared Photography. Rochester, New York: Eastman Kodak Co., 1980.

Kodak. *Beginning Creative Photography for Graphic Communications*. Rochester, New York: Eastman Kodak Co., 1980.

Kodak. *Building a Home Darkroom*. Rochester, New York: Eastman Kodak Co.

Kodak. *Color Printing Techniques* (The Kodak Workshop Series). Rochester, New York: Eastman Kodak Co., 1981.

Kodak. *Creative Darkrom Techniques*. Rochester, New York: Eastman Kodak Co., 1975.

Kodak. *The Joy of Photography*. Danbury, New Hampshire: Addison-Wesley Publishing Co., Inc., 1980.

Kodak. *Kodak Basic Photography for the Graphic Arts*. Rochester, New York: Eastman Kodak Co., 1977.

Kodak. *Kodak Black and White Darkroom Dataguide*. Rochester, New York: Eastman Kodak Co., 1978.

Kodak. *Kodak Color Darkroom Dataguide*. Rochester, New York: Eastman Kodak Co., 1980.

Kodak. *Kodak Color Separation Guide and Gray Scale*. Rochester, New York: Eastman Kodak Co., 1980.

Kodak. *Kodak Guide to 35mm Photography*. Rochester, New York: Eastman Kodak Co., 1980.

Kodak. *Kodak 1982-83 Photographic Products Reference Guide*. Rochester, New York: Eastman Kodak Co., 1982.

Kodak. *Kodak Professional Photoguide*. Rochester, New York: Eastman Kodak Co., 1979.

Kodak. *Kodak Self-Instruction Packaged Program Series*. Rochester, New York: Eastman Kodak Co., 1980. (See AV list for related book.)

Kodak. *Master Photoguide*. Rochester, New York: Eastman Kodak Co., 1978.

Kodak. *More Joy of Photography*. Redding, Massachusetts: Addison-Wesley Publishing Co., Inc., 1981.

Kodak. *More Special Effects*. Rochester, New York: Eastman Kodak Co., 1977.

Kodak. *Professional Portrait Techniques*. Rochester, New York: Eastman Kodak Co.

Kodak. *Photo Explorations*. Rochester, New York: Eastman Kodak Co., 1978.

Kodak. Photography in Your Future. Rochester, New York: Eastman Kodak Co., 1979.

Kodak. Photography with Large-Format Cameras. Rochester, New York: Eastman Kodak Co.

Kopelman, Arie, ed. ASMP Guide to Professional Business Practices in Photography. Latest ed. New York, New York: St. Martin's Press.

Kopelman, Arie, and Crawford, Tad. Selling Your Photography. New York, New York: St. Martin's Press, 1980.

Krause, Peter, and Shull, Henry. The Complete Guide to Cibachrome Printing. New York, New York: Ziff-Davis Publishing Co., 1980.

Langford, Michael. The Master Guide to Photography. New York, New York: Alfred A. Knopf, 1982.

Langford, Michael. The Step-by-Step Guide to Photography. New York, New York: Alfred A. Knopf, 1978.

Laughlin, Clarence John. The Personal Eye. Millerton, New York: Aperture, Inc., 1973.

Leekly, Cheryl, and Leekley, John. Moments: The Pulitzer Prize Photographs. New York, New York, 1978.

Lewis, Eleanor. Darkroom. Rochester, New York: Lustrum Press,. 1977.

Lutz, Robert, ed. Photographer's Market. Latest ed. Cincinnati, Ohio: Writer's Digest Books.

Lyon, Danny. Pictures from the New World: Photographs 1967-1980. Millerton, New York: Aperture, Inc., 1981.

Maddow, Ben. Edward Weston: His Life and Photographs. Millerton, New York: Aperture, Inc., 1979.

McDarrah, Fred W., ed. Photography Market Place. New York, New York: Bowker, 1981.

Meyerowitz, Joel. Cape Light. Boston, Massachusetts: New York Graphic Society, 1978.

Michaels, Duane. Real Dreams: Photo Series. Danbury, New Hampshire: Addison-Wesley Publishing Co., Inc., 1976.

Miller, Wilbur R.; Gore, Donald; and McCoy, Robert A. Photography (Basic Industrial Arts Series). Bloomington, Illinois: McKnight Publishing Co., 1978.

Mitchell, Margaretta K. Recollections: Ten Women of Photography. New York, New York: Viking Press, 1979.

Nettles, Bea. Breaking the Rules. Rochester, New York: Light Impressions Corp., 1979.

Newhall, Beaumont. History of Photography from 1839 to the Present. New York, New York: The Museum of Modern Art, 1982.

Newman, Arnold. One Mind's Eye. Boston, Massachusetts: David R. Godine, 1974; New York Graphic Society, 1978.

Nibbelink, Don. Handbook of Student Photography. Garden City, New York: Amphoto Books, 1981.

Owens, Bill. Suburbia. San Francisco, California: Straight Arrow Books, 1973.

Paternite, Stephen, and Paternite, David, ed. American Infrared Survey. Akron, Ohio: Photo Survey Press, 1982.

Perry, Robin. Photography for the Professionals. Waterford, Connecticut: Livingston Press, 1978.

Photographer and Photographer, 1979--Student's Manual. Austin, Texas: The Center for Occupational Curriculum Development.

Pittaro, Ernst, ed. The Compact Photo Lab Index. Dobbs Ferry, New York: Morgan and Morgan Press, Inc.

Pittaro, Ernst, ed. Photolab Index: Lifetime Edition. Latest ed. Dobbs Ferry, New York: Morgan and Morgan Press, Inc.

Poehls, Eddie, et al. Photography. Grand Forks, North Dakota: Department of Industrial Technology, North Dakota University, 1981.

Pollock, Peter. The Picture History of Photography. New York, New York: Harry N. Abrams, Inc., 1977.

Porter, Eliot. In Wildness Is the Preservation of the World. San Francisco, California: Sierra Club Books, 1962.

Reedy, William A. Impact: Photography for Advertising. Rochester, New York: Eastman Kodak Co., 1973.

Rothstein, Arthur. Photojournalism. Garden City, New York: Amphoto Books, 1979.

Salomon, Allyn. Advertising Photography. Garden City, New York: Amphoto Books, 1982.

Scherman, David E., ed. The Best of Life. New York, New York: Avon, 1975.

Seeley, J. High Contrast. New York, New York: Van Nostrand Reinhold Co., 1980.

Shaman, Harvey. The View Camera: Operations and Techniques. Garden City, New York: Amphoto Books, 1977.

W. Eugene Smith: His Photographs and Notes. Millerton, New York: Aperture, Inc., 1979.

Sontag, Susan. On Photography. New York, New York: Farrar, Straus, and Giroux, 1977.

Spina, Tony. On Assignment: Projects in Photojournalism. New York, New York: Amphoto Books, 1982.

Stone, Jim, ed. Darkroom Dynamics. New York, New York: Van Nostrand Reinhold Co., 1979.

Strand, Paul. Paul Strand: Sixty Years of Photographs. Millerton, New York: Aperture, Inc., 1976.

Stroebel, Leslie. View Camera Technique. Woburn, Massachusetts: Focal Press, 1976.

Stroebel, Leslie, and Todd, Hollis N. Dictionary of Contemporary Photography. Dobbs Ferry, New York: Morgan and Morgan Press, Inc., 1976.

Stroebel, Leslie; Todd, Hollis N.; and Zakia, Richard D. Visual Concepts for Photographers. Woburn, Massachusetts: Focal Press.

Swedlund, Charles. Photography. 2nd ed. New York, New York: Holt, Rinehart, and Winston, 1981.

Szarkowski, John. American Landscapes. New York, New York: The Museum of Modern Art, 1981.

Szarkowski, John. Callahan. Millerton, New York: Aperture, Inc., 1976.

Szarkowski, John. Looking at Photographs. New York, New York: The Museum of Modern Art, 1981.

Szarkowski, John. Mirrors and Windows: American Photography Since 1960. Boston, Massachusetts: New York Graphic Society, 1978.

Szarkowski, John. Walker Evans. New York, New York: The Museum of Modern Art, 1971.

Tucker, Anne, ed. The Woman's Eye. New York, New York: Alfred A. Knopf, 1973.

Uelsmann, Jerry N. Silver Meditations. Dobbs Ferry, New York: Morgan and Morgan Press, Inc., 1975.

Upton, Barbara, and Upton, John. Photography. 2nd ed. Boston, Massachusetts: Little, Brown, and Co., 1981.

Vestal, David. The Craft of Photography. New York, New York: Harper and Row, 1975.

Wade, Kent. Alternative Photographic Processes. Dobbs Ferry, New York: Morgan and Morgan Press, Inc., 1978.

Walsh, George; Held, Michael; and Naylors, Collins, ed. Contemporary Photographers. New York, New York: St. Martin's Press, 1982.

Weiss, Harvey. Lens and Shutter. Redding, Massachusetts: Addison-Wesley Publishing Co., Inc., 1971.

Weston, Brett. Photographs from Five Decades. Millerton, New York: Aperture, Inc., 1980.

Weston, Cole. Cole Weston: Eighteen Photographs. Minneapolis, Minnesota: Media Loft, Inc.

Weston, Edward. Edward Weston: The Flame of Recognition. Minneapolis, Minnesota: Media Loft, Inc.

White, Minor. Minor White: Rites and Passages. Millerton, New York: Aperture, Inc., 1978.

White, Minor; Zakia, Richard D.; and Lorenz, Peter. The New Zone System Manual. Dobbs Ferry, New York: Morgan and Morgan Press, Inc., 1978.

Whittenson, Milton W. Careers in Photography. New York, New York: Germain School of Photography, 1973.

Winogrand, Garry. Public Relations. New York, New York: The Museum of Modern Art, 1977.

Wise, Kelly. The Photographer's Choice. New York, New York: Addison House, 1976.

Zakia, Richard D., and Todd, Hollis N. Color Primer I and II. Dobbs Ferry, New York: Morgan and Morgan Press, Inc., 1974.

Zakia, Richard D. Perception and Photography. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1975.

Zimmerman, John; Kauffman, Mark; and Leiffer, Neil. Masters of Contemporary Photography: Photographing Sports. Los Angeles, California: Askog/ Petersen.

Book Collections, Photographic Series, and Major Photographic Publishers

Amphoto--Series of SB Books on Photography. Garden City, New York: Amphoto Books.

Aperture History of Photography. Millerton, New York: Aperture, Inc., 1976-80.

Series includes:

1. Wynn Bullock, 1976
2. Henri Cartier-Bresson, 1976
3. Robert Frank, 1976
4. Alfred Stieglitz, 1976
5. Andre Kertesz, 1977
6. Jacques-Henri Lartigue, 1977
7. August Sander, 1977
8. Edward Steichen, 1978
9. Weegee, 1978
10. Erich Salomon, 1979
11. Clarence H. White, 1979
12. Eugene Atget, 1980
13. Walker Evans, 1980
14. Man Ray, 1980
15. Frank Meadow Sutcliffe, 1980
16. Dorothea Lange, 1981

Masters of Contemporary Photography. Los Angeles, California: Askog/Petersen.

Titles include:

Erwitt, Elliott, The Private Experience
Kane, Art, The Persuasive Image
Mark, Mary Ellen, and Leibowitz, Annie, The Photojournalist
Michaels, Duane, The Photographic Illusion
Smith, J. Frederick, Photographing Sensuality
Stern, Bert, The Photo Illustration: How to Turn Ideas into Images
Zimmerman, John, et al., Photographing Sports

Light Impressions Collection. Rochester, New York: Light Impressions Corp. Major supplier of photographic art books.

Light Impressions Corp.
P. O. Box 940
Rochester, New York 14603

Media Loft Photographic Library. Minneapolis, Minnesota: Media Loft, Inc.

Media Loft, Inc.
10720 40th Avenue North
Minneapolis, Minnesota 55441

Books available include:

Adams, Ansel, The Portfolios of Ansel Adams
Allard, William Albert, Vanishing Breed: Photographs of the Cowboy and the West
American Society of Magazine Photographers, Professional Business Practices in Photography
Aperture Monograph Series:
    Wynn Bullock
    Henri Cartier-Bresson
    Andre Kertesz
    Erich Salomon
    Edward Steichen
Cavallo, Robert M., and Kahan, Stuart, Photography: What's the Law?
Cavallo, Robert M., and Kahan, Stuart, The Business of Photography
Coles, Robert, Dorothea Lange: Photographs of a Lifetime
Craven, George M., Object and Image: An Introduction to Photography, 2nd ed.
Davis, Phil, Beyond the Zone System
Davis, Phil, Beyond the Zone System Workbook
Evans, Walker, Walker Evans
Gassan, Arnold, Handbook for Contemporary Photography
Gibson, Ralph, Days at Sea
Gibson, Ralph, Deja Vu
Gibson, Ralph, The Somnambulist
Haas, Ernst, The Creation
Johnson, William S., ed., W. Eugene Smith: Master of the Photographic Essay
Kelly, Jain, ed., Darkroom II
Meyerowitz, Joel, Cape Light
Newhall, Beaumont, The History of Photography from 1939 to the Present
Newman, Arnold, One Mind's Eye
Stroebel, Leslie; Todd, Hollis N.; and Zakia, Richard D., Visual Concepts for Photographers
Szarkowski, John, Looking at Photographs
Szarkowski, John, The Photographer's Eye
Uelsmann, Jerry N., Fables by Russell Edson
Upton, Barbara, and Upton, John, Photography, 2nd ed.
Weston, Brett, Photographs from Five Decades
Weston, Cole, Cole Weston: Eighteen Photographs
Weston, Edward, Edward Weston: The Flame of Recognition
White, Minor, Minor White: Rites and Passages

Morgan and Morgan Photographic Books. Dobbs Ferry, New York: Morgan and Morgan Press, Inc.

Morgan and Morgan Press, Inc.
145 Palisade Street
Dobbs Ferry, New York 10522

Petersen's Photographic Library. Los Angeles, California: Petersen Publishing Co.

Petersen Publishing Co.
8490 Sunset Boulevard
Los Angeles, California 90069

Titles include:

Basic Darkroom Techniques
Basic Guide to Photography
Blueprint Series, Vols. 1 and 2
Close-up Photography
Color Printing
Creative Techniques
Electronic Flash Photography
Figure Photography
Free-Lance Photography
Guide to Creative Darkroom Techniques
Helprin, Ben, *Photographic Self-Assignments*, 1979
Image Magic
Increasing Film Speed
Interchangeable Lenses
Photo Filters
Photo-Graphics
Photolighting Techniques
Photo Retouching and Restoration
Small Camera Portraiture
Special Effects
Sports Photography
Telephoto Photography
Wedding Photography
Wide Angle Photography

The Time/Life Library of Photography. New York, New York: Time/Life Books, 1970.

Titles include:

The Art of Photography, 1971
The Camera, 1970
Caring for Photographs, 1972
Color, 1970
Documentary Photography, 1972
Frontiers of Photography, 1972
The Great Photographers, 1971
The Great Times, 1970
Light and Film, 1970
The Negative
Photographing Children, 1971
Photographing Nature, 1971
Photography as a Tool, 1970
Photojournalism, 1971
The Print, 1970
Special Problems, 1971
The Studio, 1971
Travel Photography, 1972

Other Resource Materials

Craven, George M. "The Art of Photography: A Basic Library." The Friends of Photography Newsletter. Carmel, California: The Friends of Photography. Issue 6:3 (March, 1983).

Kodak. 1981 Guide to Kodak Information: Kodak Books. Rochester, New York: Eastman Kodak Co., 1981.

Occupational Brief: Photographers. Moravia, New York: Chronicle Guidance Publications, Inc., 1975.

Photographic Dealers and Studios. Washington, D.C.: Small Business Administration.

Periodicals

Afterimage. Rochester, New York: Visual Studies Workshop. (Nine issues annually).

Nathan Lyons
Visual Studies Workshop
31 Prince Street
Rochester, New York 14607

American Photographer. Boulder, Colorado: American Photographer Magazine. (Monthly).

American Photographer Magazine
1255 Portland Place
Box 2833
Boulder, Colorado 80302

Aperture. Millerton, New York: Aperture, Inc. (Quarterly).

Aperture, Inc.
Elm Street
Millerton, New York 12546

Camera Arts. New York, New York: Ziff-Davis Publishing Co.; Boulder, Colorado: Camera Arts. (Monthly).

Ziff-Davis Publishing Co.
One Park Avenue
New York, New York 10016

and

Camera Arts
P. O. Box 2783
Boulder, Colorado 80302

Creative Camera. London, England: Creative Camera. (Monthly).

Creative Camera
Coo Press Ltd.
19 Doughty Street
London, WC1N 2PT, England

Communication Arts Magazine. Palo Alto, California: Communication Arts. (Bi-monthly).

Communication Arts
P. O. Box 10300
410 Sherman Avenue
Palo Alto, California 94303

Darkroom Photography. San Francisco, California: Darkroom Photography. (Eight issues annually).

Darkroom Photography
609 Mission Street
San Francisco, California 94105

Modern Photography. Des Moines, Iowa: Modern Photography. (Monthly).

Modern Photography
P. O. Box 10786
Des Moines, Iowa 50340

News Photographer. Durham, North Carolina: National Press Photographers Association. (Monthly).

Petersen's Photographic. Los Angeles, California: Petersen Publishing Co. (Monthly).

Petersen Publishing Co.
8490 Sunset Boulevard
Los Angeles, California 90069

Picture Magazine. Los Angeles, California: Picture Magazine, Inc. (Bi-monthly).

Picture Magazine, Inc.
4121 Wilshire Boulevard, Suite 110
Los Angeles, California 90010

Popular Photography. New York, New York: Ziff-Davis Publishing Co. (Monthly).

Popular Photography
Circulation Department
P. O. Box 2775
Boulder, Colorado 80302

Professional Photographer. Des Plains, Illinois: Professional Photographers of America.

Studio Photography. Hempstead, New York: Photo-Products News, Inc. (Monthly).

Frederic Rosen
Photo-Products News, Inc.
250 Fulton Avenue
Hempstead, New York 11550

Technical Photography: For Industrial, Military, and Government Still, Cine, and A.V. Professionals. Woodbury, New York: Technical Photography, PTN Publishing Co. (Monthly).

Technical Photography
PTN Publishing Co.
101 Crossways Park West
Woodbury, New York 11797

APPENDIX B

Professional Associations

American Society of Magazine Photographers
205 Lexington Avenue
New York, New York 10016

American Society of Picture Professionals
P. O. Box 5283, Grand Central Station
New York, New York 10063

National Art Honor Society
c/o National Art Education Association
1916 Association Drive
Reston, Virginia 22091

National Art Education Association
1916 Association Drive
Reston, Virginia 22091

National Freelance Photographers Association
60 East State Street
Doylestown, Pennsylvania 18901

National Photography Instructor's Association
Photography Area
California State University
Long Beach, California 90840

National Press Photographers Association
Box 1146
Durham, North Carolina 27702

Photographic Society of America
2005 Walnut Street
Philadelphia, Pennsylvania 19103

Professional Photographers of America
1090 Executive Way
Des Plains, Illinois 60018

Society for Photographic Education
P. O. Box 1651
F.D.R. Post Office
New York, New York 10022

Virginia Society for Photographic Arts
P. O. Box 7381
Richmond, Virginia 23208

APPENDIX C

AUDIOVISUAL MATERIALS

I. **The Center for Humanities, Inc.**
Communications Park
Box 1000
Mount Kisco, New York 10549

A. PHOTOGRAPHY--THE CREATIVE EYE (sound-slide series)

1. Effective Darkroom Technique
2. How to Develop Film
3. How to Print and Enlarge
4. Learning to See and Understand: Developing Visual Literacy
5. A Picture's Worth a Thousand Words: Interpreting Visual Information

B. MEDIA LOFT-PRODUCED SLIDE-TAPE PROGRAMS AVAILABLE FROM THE CENTER FOR HUMANITIES

1. The Challenge of Freelance Photography: An Interview with Judith Gefter (#647)
2. Composing Images: The Still-Life Photography of Henry Sandbank (#640)
3. The Dramatic Moment: Rich Clarkson on Photojournalism (#641)
4. Early Photojournalism in Europe and America (#644)
5. The Photographer's Art: An Interview with Ralph Gibson (#645)
6. The Photographic Essay: A Certain Time--A Certain Place (#643)
7. Responding to the Moment: The Photography of Burk Uzzle (#646)
8. Shedding Light on Light: Photographic Lighting Explained (#639)
9. Stark Images: The Documentary Photography of Donald McCullin (#642)

C. EASTMAN KODAK AUDIOVISUAL PROGRAMS

1. Basic Picture-Taking Techniques (#649)
2. The Beginnings of Photographic Composition (#651)
3. Color Printing from Color Negatives (#650)
4. Film: How It Works (#648)
5. Kodak Annual Shapshot Awards

For other titles of Kodak audiovisual programs, see the latest issue of Kodak's Index to Kodak Information.

II. **Eastman Kodak Co.**
P. & F. Product Support Publications
Rochester, New York 14650

KODAK SELF-INSTRUCTION PACKAGED PROGRAM SERIES

Each program in this series contains a synchronized sound/film and script package. The student can work with a projection system at his or her own pace.

For other titles of Kodak audiovisual programs, see the latest issue of Kodak's Index to Kodak Information.

III. **Educational Dimensions Corp.**
Box 126
Stamford, Connecticut 06904

FILMSTRIP/CASSETTE UNIT

Creating a Professional Portfolio

IV. **Film America**
(Attention: John Huszar)
420 East 55th Street
New York, New York
(Phone: 212/486-0552)

FILM

Ansel Adams, Photographer

V. **Film Rental Center of Syracuse University**
1455 East Calvin Street
Syracuse, New York 13210

FILMS

1. Cameras and Careers
2. The Naked Eye
3. Time Machine

VI. **Greystone Films, Inc.**
Box 303
Kingsbridge Station
Riverdale, New York 10463

BASICS: PHOTOGRAPHY (filmstrip/cassette series)

1. Developing Black and White Film
2. Exposure
3. Printing Black and White
4. Using the Camera

VII. **Instructional Media Associates, Inc.**
225 West University Drive, Suite 108
Tempe, Arizona 85281

A. CAMERA TECHNIQUE
(audiovisual programs coordinated with Basic Photography by Joel A. Benedict)

1. The Camera
2. Camera Systems
3. Composition
4. Copying Slides
5. Exposure
6. Lighting
7. Photographic Copying

B. DARKROOM PROCEDURES
(audiovisual programs coordinated with Basic Photography by Joel A. Benedict)

1. The Contact Sheet
2. Darkroom Tools and Techniques
3. Developing Black and White Roll Film
4. Enlarging
5. Finishing and Mounting Prints

C. COLOR SERIES
(audiovisual programs coordinated with Basic Photography by Joel A. Benedict)

1. Developing Color Negatives
2. Developing Color Slides
3. Photographing Color
4. Printing Color Negatives
5. Printing Color Slides

VIII. **International Instructional Television Cooperative, Inc.**
Falls Church, Virginia

THE DEVELOPING IMAGE (video cassette series)

1. Beyond Our Vision
2. The Camera Image: More than a Record
3. Expressing a 20th Century Vision
4. The Family Album
5. Illusion of Reality
6. Light from Within
7. Solution to Images
8. Witness to the American Experience

IX. **Media Loft, Inc.**
10720 40th Avenue North
Minneapolis, Minnesota 55441

PHOTOGRAPHY SLIDE-TAPE PROGRAMS

1. Advanced Tools for Beginning Photographers
2. On Assignment: The Photojournalists, Parts I & II (On Annie Griffiths, Bruce Bisping, Skip Heine, and Peggy Walsh)
3. Before LIFE, The Camera Was a Man: Early European Photojournalism and Its American Influence
4. The Challenge of Freelance Photography: An Interview with Judith Gefter
5. Control and Command: Exposure as a Creative Force
6. To Dream with Open Eyes (On Ernst Haas)
7. Expanding Photographic Vision: The Sight and Insight of Ernst Haas, Part II
8. To Explore and Express (On Eva Rubenstein)
9. The Gentle Nomad: Jim Brandenburg, the Land and Its Creatures
10. Inroads and Outroads: How Donald McCullin Photographs Combat and the Struggle to Survive
11. Moments Within Us: Exploring the Photographic Essay (On William Allard)
12. Photography and the Electronic Image (On Howard Sochurek)
13. Point of Departure: Developing a Creative Approach to Photography and Its Publication (On Ralph Gibson)
14. Post-Visualization and the Multiple Image: The Vision of Jerry Uelsmann
15. Rich Clarkson! Anatomy of a Photo Director
16. Shedding Light on Light
17. Thinking Photographically (On Henry Sandbank)
18. Time, Place, and Subject: Responding to the Moment (On Burk Uzzle)
19. The Weston Eye: Composition, Detail, and the Large Format Image (On Edward Weston)

X. **Pennsylvania State University Audiovisual Servicenter**
University Park
Pennsylvania 16802

NATIONAL EDUCATIONAL TELEVISION PHOTOGRAPHY--THE INVISIVE ART SERIES (16 mm film)

Language of the Camera Eye

XI. **The Photographer's Eye**
P. O. Box 146
New Paltz, New York 12561

THE PHOTOGRAPHER'S EYE
(26-part television series with host photographer Pete Turner)

1. Eve Arnold
2. Carol Beckwith
3. Rebecca Blake
4. Sonja Bulatty and Angelo Someo
5. Cornell Capa
6. Jerry Dantzic
7. David and Anne Doubilet
8. Anthony Edgeworth
9. Thomas Faulkner
10. Burt Glinn
11. Greig Heisler
12. Art Kane
13. Douglas Kirkland
14. Steve Krongard
15. Maureen Lambrey
16. Neil Leifer
17. Harvey Lloyd
18. Jay Maisel
19. Duane Michaels
20. Ralph Morse
21. Arnold Newman
22. Gordon Parks
23. Galen Rowell
24. Jerry Uelsmann
25. Cole Weston
26. John Zimmerman

XII. **Scholastic Magazines, Inc.**
50 West 44th Street
New York, New York 10036

IMAGES OF MAN (films with teacher's guide included)

1. Images of Man, I: Cornell Capa
2. Images of Man, I: Bruce Davidson
3. Images of Man, I: Don McCullin
4. Images of Man, I: W. Eugene Smith
5. Images of Man, II: William Alber Allard
6. Images of Man, II: Henri Cartier-Bresson
7. Images of Man, II: Brian Lanker
8. Images of Man, II: Eliot Porter

XIII. **John A. Stewart Productions**
4431 N.E. Royal Court
Portland, Oregon 97213

FILM (color, 27 minute, 16mm. Sale: $450; rental: $45)

The Woman Behind the Image (On Judy Dater)

XVI. **Time-Life Multimedia**
Time-Life Building
New York, New York 10020

VIDEO/FILM

The Photographers

For a comprehensive guide to audiovisual materials on photography, refer to the following books:

Coleman, A.D.; Grant, Patricia; and Sheer, Douglas I. The Photography A-V Program Directory. Staten Island, New York 10394 (P. O. 78): Photography Media Institute, Inc., 1980.

Kodak. Kodak 1982-83 Photographic Products Reference Guide. Rochester, New York 14650: Eastman Kodak Co., 1982.

APPENDIX D

Equipment and Supplies List

1. Audiovisual Equipment:

   Slide projector
   Slide trays
   Viewing screen
   Overhead projector
   Opaque projector

2. Cameras:

   35mm rangefinder
   35mm single lens reflex with built-in meter
   120mm (2-1/4 x 2-1/4") twin lens or single lens reflex camera
   4" x 5" view camera with lens

3. Camera Accessories:

   Tripod
   Cable release
   Focusing cloth
   Film holder
   Polaroid back (4" x 5")
   Camel hair brush
   Camera batteries
   Compressed air
   Camera manuals
   Camera case or bag
   Camera strap
   Hotshoe or flashshoe
   Magnification loupe
   Slide duplicator
   Copystand
   Level
   Kodak gray scale
   Kodak color chart
   Pocket exposure estimation guide
   Bellows extension exposure dial
   Focusing tape
   Extension bellows

4. Films:

   35mm black and white film
   35mm color negative film
   35mm color slide film (Kodak Ektachrome)
   35mm film in bulk form
   120mm black and white and color film
   4" x 5" sheet film (black and white and color)
   Polaroid film (black and white and color)
   Kodak Kodalith film
   Kodak SO-015 film
   Amberlith or rubylith masking film
   Ulano blue photosilkscreening film

5. Filters:

Photographic filters for black and white film
Color-compensating and correction filters for color film
Variable contrast filters for black and white paper
Color balancing filters for color prints
Special effects filters for black and white and color film
Filter holder for 35mm camera

6. Flash and Studio Equipment:

Flash unit
Flash bracket
Hotshoe
Batteries for flash unit
Strobe unit
AC and DC cords
PC extension cords
Slave units
Photofloods
Tungsten lamps (quartz-halogen)
Light stands
Barndoors
Diffusers
Scrims
Snoots
Spots
Broads
Booms
Cables
Dolly
Reflectors
Seamless background paper
Studio tripod
Umbrellas
Soft box or light
Standard 18% neutral gray card
Exposure meter (flash and incident)
White cardboard reflectors
Black non-reflective material

7. Illustrations/Examples:

Black and white prints
Color prints
Filter data sheet
Time-temperature chart
Kodak gray scale
Teacher-prepared charts and illustrations

8. Lens:

Normal lens
Wide angle lens
Telephoto lens
Fisheye lens
Macro lens
Zoom lens
Interchangeable lens

9. Lens Accessories:

Lens shade
Lens cap
Lens brush
Lens cleaning fluid
Lens tissue
Lintless cloth or paper

10. Light Meters:

Hand-held incident light meter
Hand-held reflected-light meter
Spot meter
Flash exposure meter

11. Paper:

Color paper (for prints from color negatives)
Color paper (for prints from color slides)
Black and white graded contrast paper (fiber-based and resin-coated in various sizes, tones, finishes, and weights)
Black and white variable contrast paper (fiber-based and resin-coated in various sizes, tones, and finishes)
Etching paper for non-silver processes

12. Processing Chemicals:

Black and white film developers (D-76 and Microdol-X)
Black and white paper developers (Dektol)
Glacial acetic acid
Indicator stop bath
Fixer or rapid fix
Hypo-clearing agent
Permawash
Hypo-check
Distilled water
*Color negative developing kit
*Color slide developing kit
*Color prints from color slides kit
*Color prints from color negatives kit
Van Dyke Brown solution
Cyanotype solution
Toners
Film cleaner
Lacquer thinner
Acetone
Silkscreen paints

*Recommended: Unicolor, Kodak, or Beseler

13. Processing Equipment (for film and paper):

    Film processing sink
    Paper processing sink
    Darkroom
    Safelight
    Temperature control unit
    Thermometers
    Temperature holding trays
    Print trays
    Film development tanks, reels, and hangers
    Timers
    Tongs
    Towels
    Color paper drum
    Color film drum
    Color drum roller
    Chemical mixing containers
    Chemical storage containers
    Funnels
    Graduates, stainless steel or plastic
    Film drying cabinet
    Print dryer or drying rack
    Enlarger with lens
    Contact frame or printer
    Silkscreen and accessories
    Negafiles or glassine envelopes
    Changing bag
    Paper cutter or trimmer
    Paper safe
    Grain focuser
    Rubber gloves
    Safety goggles
    Scissors
    Sponges
    Stirrers
    Red filters
    Variable contrast filters
    Negative carriers
    Dodging and burning tools
    Squeegees
    Film clips
    Color printing filters
    Film cassettes
    Film cassette opener
    Easel
    Film loading booth
    Anti-static cloth
    Sheet of glass (1/4" thick)

14. Print Presentation and Framing Equipment:

- Acid-free linen tape
- Art gum eraser
- Camel hair brush
- Dry mount press
- Dry mount tissue
- Section frames
- Glass
- Wire or cord
- Screwdrivers
- Glass cleaner
- Cleaning cloths
- Scissors
- Spotting or retouching dyes
- Spotting brushes
- Mat cutter
- Measuring rule
- Mount board
- Lintless gloves
- Pens and markers
- Tacking iron
- Straight edge

APPENDIX E

PHOTOGRAPH CRITIQUE CHECKLIST

Student:______________________ Date __________

Instructor:______________________

Photograph (description):______________________

RATING: S=satisfactory; U=unsatisfactory

Criteria	Rating		Instructor's Initial
	S	U	
I. **CONTENT**			
A. **Subject** (Is it interesting, a creative idea, or an original approach to a common subject?)			
B. **Clarity** (Is idea clearly expressed?)			
C. **Impact** (Is image appealing to the eye, mind, or emotions?)			
II. **TECHNIQUE**			
A. **Focus/Depth of Field** (Are important areas in clear focus? Does depth of field enhance subject?)			
B. **Composition** (Framing)			
1. Format (Is it correct for subject--horizontal or vertical?)			
2. Framing (Does it include all important parts of subject?)			
3. Dead space (Is it avoided?)			
4. Center of interest (Does it keep the viewer "in the frame"?)			
C. **Angle** (Is there clear view of activity? Does angle fit subject?)			
D. **Background** (Is it distracting or does it add to subject?)			
E. **Setting/Location** (Is it appropriate for the subject?)			
F. **Exposure/Lighting** (Is there detail in extremely dark or light areas? Is subject exposed correctly? Does the print seem grainy?)			

Criteria	Rating		Instructor's Initial
	S	U	
III. **PROCESSING SKILLS**			
A. **Negative Care** (Is negative free of dust, lint, scratches, and stains?)			
B. **Exposure** (Is print too light or too dark?)			
C. **Contrast** (Does print have solid blacks, clean whites, and a good range of midtones?)			
D. **Local Printing Corrections**			
1. **Cropping** (Does it emphasize subject and delete extraneous matter?)			
2. **Burning in** (Is there detail in light areas?)			
3. **Dodging** (Is there detail in dark areas?)			
E. **Labeling** (Is print labeled according to subject, date, and printing f-stop and time?)			
IV. **WORK FILE**			
A. **Completeness** (Are all negatives, contact sheets, and prints included in file and labeled appropriately?			
B. **Organization** (Is work in order, easy to find, and neat?)			
COMMENTS			

CHECKLIST 2.3

DUTY: 2. Operating and maintaining 35mm single lens reflex camera and accessories

TASK: 2.3 Load and unload a 35mm film cassette

ACTIVITY	RATING	
	Acceptable	Unacceptable
1. Open cassette		
2. Pull out piece of tape to proper length		
3. Open door of bulk film loader		
4. Attach tape to film		
5. Attach tape and film to spool, with spool turned in proper direction relative to crank		
6. Check tape for proper attachment		
7. Assemble cartridge parts and insert cartridge in loader		
8. Close door on loader and prepare to wind on film		
9. Wind on correct amount of film according to chart or counter		
10. Unlock loader door and remove film		
11. Label film with brand name, film speed sensitivity or ASA number, the number of exposures, and student's name		

CHECKLIST 7.24

DUTY: 7. Processing and finishing film and prints

TASK: 7.24 Operate and maintain photo lab

ACTIVITY	RATING	
	Acceptable	Unacceptable
1. Mix, test, and store chemicals		
2. Take inventory and replace supplies as needed		
3. Rinse and dry implements		
4. Clear and clean sink and counter tops		
5. Store tools and equipment		
6. Tighten and seal all lids and containers		
7. Clean all trays		
8. Clean all lenses		
9. Store all negatives		
10. Store all completed prints		
11. Place all heads down on enlargers		

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